INVESTIGATIONS OF THE POUND NET CATCH AT KELLEY'S ISLAND, OHIO, WITH PARTICULAR REFERENCE TO A SPECIALLY DESIGNED NET OF THE FISH COMMISSION WITH A MESH OF LARGER THAN ORDINARY SIZE. MAY, 1895. - BY B. L. HARDIN.

Under instructions issued May 9, I arrived at Kelley's Island, Ohio, May 11, 1895. The Fish Commission net was overhauled and found in good order.

- May 12. Heavy wind and rain. Thermometer 34° F. No fishing.
- May 13. Storm continued. No fishing.
- May 14. Still cold and storming, but Ditchy lifted 14 pounds, 3 days fishing, and secured about 400 lbs. fish.

# CATCH: -

- Whitefish. About 50 lbs. Largest weighed 5 lbs. Average 2 1/4 lbs. One small one weighed 1 1/4 lbs.
- Herring. About 60 lbs. Average 3/4 lb.

  About a dozen weighed less than 1/2

lb., and half dozen did not weigh over 1/4 lbs.

Black bass. - About 20 lbs. Average

1 1/2 lbs. No very small ones. One
large one weighed 4 lbs. and contained a sheepshead weighing about 1/2 lb.

Catfish.- About 25 lbs. Average 2 to 3
lbs. Largest 4 lbs. No very small
ones.

Perch .- About 40 lbs.

White bass. - Very few and thrown in with No. 2 pickerel and saugers.

No. 1 pickerel .- About 25 lbs.

Mullet .- About 30 lbs.

Sturgeon. - Two. One weighed 16 lbs.
Other about same size.

Pickerel (blue and yellow) and Saugers.About 200 lbs. These were mixed and called No. 2's. Yellow pickerel predominated and saugers next. Comparatively few blues. Many of these fish were very small, weighing no more than 1/4 lb., and several even less. These very small ones were

thrown off the dock, dead.

Wind veered to N. W. and blew very hard all day. Temperature 40° F.

May 15. Ugly weather continues. Wind abating, very cold. Ditchy lifted 14 nets, one day's fishing.

CATCH: -

Whitefish. - 5 in count, weighing between 2 and 3 lbs. each.

Herring. About 35 lbs. No very small ones. Average 3/4 lb. each.

Black bass .- About 20 lbs., medium size.

Catfish -- About 15 lbs., medium size.

Perch .- About 50 lbs.

White bass .- About half dozen.

No. 1 pickerel .- About 50 lbs.

No. 2 pickerel and Saugers. - About 250 lbs., mostly yellow pickerel. Some very small ones.

Mullet .- About 60 lbs.

Sheepshead. - Very few. Storm has driven them away. Caught scarcely anything but sheepshead before the storm.

. The Fish Commission net was introduced to-

shore of the island, Ditchy has 5 strings, each string containing 3 lbs. Adopting this west to east revolution the strings will be called A, B, C, D, and E. The nets in each string will be called from the shore outward 1, 2, and 3. The sides of each net, facing the lake and beginning on the left hand side of each tunnel, will be named in order a, b, c, and d. So that in the F. C. net, a will represent 3 1/2 inch mesh; b, 3 1/4; c, 3; and d, 2 1/4.

A.1, rests in 23 feet of water, A.2, in 24 feet, A. 3, in 25 feet.

B. 1, in 23 feet, B. 2, in 23 feet, B. 3, in 25 feet.

C. 1, in 19 feet, C. 2, in 26 1/2 feet,C. 3, in 28 feet.

D. 1, in 26 feet, D. 2, in 29 feet, D. 3, in 32 feet.

E. 1, in 30 feet, E. 2, in 32 feet, E. 3, in 35 feet.

The following are the present actual sizes of mesh im Fish Commission net after placed in the water. Side a, 3 - 3 1/4 inches (ext. measure), side B, 2 3/4 inches, side c, 3 1/8 -

 $3 \ 3/8 \ inches$ , side d,  $1 \ 7/8 - 2 \ 1/8 \ inches$ .

The mesh in side of ordinary cribs in same string with F. C. net is 2 inches, in some places only 1 3/4§

Location of Fish Commission net. This net is placed in the middle of the central string of pounds off south shore of Kelley's Island. According to adopted nomenclature it is Net 2, in string C., located in 26 1/2 feet of water.

Temperature water 56° F.

- May 16. Day clear and very cold. Observed lifting of following nets:
- c. 1, b. (C. string, inside net, lifted on b side) 3 small pickerel, about 1/4 lb. each, gilled before lifted, and dead or nearly so. Time for extraction inappreciable. Two drawn out head first and saved, the other did not pull out easily, so its head was torn off.

CATCH, (very small):

Herring .- 4 small ones.

Black bass .- 1 medium size.

Pickerel. - 9, 5 very small, 4 good size.

Sheepshead. - dozen small ones.

C. 2, b. (Fish Commission net).

One live pickerel (12 3/4 inch, 3/4 lb.) gilled before lifting on side b. Held over base of pectorals and immediately anterior to dorsal. Extraction occupied 1/2 minute. None gilled while lifting.

CATCH: -

Whitefish. - 2, (13 1/2 in. 1 1/8 1b., and 19 1/2 in. 4 1/8 1b.).

Herring. - 4, (12 3/4 in. 7/8 lb., 13 in. l lb., 13 in. l 1/4 lb., 13 l/2 in. l 1/4 lb.).

Black bass. - 3, (12 in. 3/4 lb., 7/8 lb., 1 1/2 lbs).

Perch. - 1, (3/4 lb.).

Rock bass .- 1, (small) .

White bass.-5 (one 1 1/4 lbs., others about 3/4 lb.).

Mullet .- 1, (2 1/2 1bs). -

Yellow pickerel. - 3, (12 3/4 in. 7/8 lb., 14 1/2 in. 1 lb., 17 1/2 in. 1 1/2 lb.)

Blue pickerel .- 1, (14 1/2 in. 1 lb.).

Sheepshead .- About a dozen small ones.

All these fish were of a good marketable size. Men remarked that this net was very

light and much easier to lift than the others.

B. 1, b. (larger catch, fish smaller). Gilled before lifting, 4 pickerel (weighing 1/4 to 1/2 lb.) and one small perch. Time for extraction inappreciable.

CATCH: -

Herring .- 2 or 3 good size.

Catfish .- 2, fair size.

Mullet .- Several, good size.

No. 1 pickerel .- Several, 4 to 6 lbs.

No. 2's.- Good many, weighing 1/4 - 1/2+1b.

Black bass .- Several, good size.

B. 2, b. (smaller catch). None gilled. CATCH:-

No. 2's.- (Yellow pickerel and saugers) several small ones weighing 4 to 6 oz.

No. 1 pickerel. - 3 large ones (5 to 6 lbs).

Catfish -- 2 or 3 good size. One very small one thrown over alive.

Black bass .- Several, good size.

Sheepshead.2 or 3 small ones.

After lifting and getting under way for

next pound, two or three small pickerel and the sheepshead were thrown overboard, alive and in good condition.

B. 3, b. One very small pickerel(1/8 lb.) gilled before lifting.

CATCH, (almost nothing):

Herring.- 6, 3 good size (3/4 to 1 lb.)
and 3 or 4 very small, about 1/4 lb.

<u>Pickerel</u>.- 3 very small, scarcely over 1/4 lb.

Sauger .- 1 very small.

Black bass .- 1 or 2 (1 to 1 1/2 1bs).

White bass -- 1 or 2 small.

Sheepshead .- 1 or 2 small.

Perch .- 1.

- A. 1, b. Small catch consisting almost solely of small No. 2 pickerel and saugers, some very small. In addition, 3 or 4 No. 1 pickerel, 1 or 2 white bass and two small suckers.
- A. 2, b. Catch: 5 small pickerel, 3 sheepshead and one sauger.

A. 3, b.

CATCH: -

Herring. - 1 (3/4 lb.).

Catfish. - 3, two good size, and one very small (1/4 lb.) which was thrown overboard alive.

No. 2 pickerel and saugers. - About 15 lbs., some very small.

Sheepshead .- Very few.

The whole catch from the eight pounds made about 3 boxes, a little improvement over yesterday's catch.

Temperature of water 54° F.

May 17. Stiff S. W. breeze. Cold. Observed lifting of following nets:

C. 2, b. Before lifting gilled in a. d. corner one dead herring, 12 3/4 in., 1 lb. 2 oz. On side a. 3 herring, 11 in., 1/2 lb.; 12 1/4 in., 1 lb. (both dead); and 13 1/2 in., 1 1/8 lb. alive. On side d. 1 yellow pickerel 13 1/4 in., 7/8 lb. About 1 min. required to release.

<sup>:</sup> Gilled while lifting 2 perch, 2 small sheepshead and 1 pickerel (yellow) the gilled

perch weighed between 1/4 and 1/2 1b.

CATCH: -

Perch.-12.

Sheepshead. - 15 (3/4 to 2 lbs.).

Black bass. - 9, smallest 11 1/2 in.,

7/8 lb., largest weighed 2 lbs.

Average 1 1/2 lbs.

White bass. - 12 (1/2 to 7/8 1b.).

Pickerel.- (yellow), 7, smallest 13 1/4
in., 12 oz., largest 15 1/2 in. 1 1/8
lbs.

Whitefish -- 1, 3 lbs.

Mooneye. - 1.

Herring. - 38, average 3/4 lbs. 5 small ones measuring 11 to 11 1/2 in. and weighing between 1/2 and 3/4 lb.

Smallested weighed 6 oz.

Following are weights and measures of some of the herring:

#### HERRING.

Length.	Weight.
13 3/4 in.	1 lb. 4 oz.
13 3/4 "	1 * 3 *
13 *	13 "
12 1/2 *	13 "

12 1/2 in. 1 lb. 1 oz.

12 1/2 \* 13

12 13 "

12 1/4 "

Lifted C. 1, b. None gilled.

CATCH: -

Herring .- 3, two good size, and one 10 3/4 in. 7 oz.

Mooneye .- About 18 lbs. all small.

Sheepshead .- 14. Dozen small ones between 1/4 and 1 lb. Two large ones.

1 lb.

Lifted B. 3, b. Two small pickerel gilled before lifting, 3 while lifting. 1/2 minute consumed in releasing them. All too small for market and pushed out of the net into the water.

CATCH: -

Herring .- 4. Three good size, one small weighing 4 oz.

Pickerel .- (blues scarce). 55. all small No. 2's.

Sheepshead .- 26., all small but one.

No. 1 pickerel .- 3.

White bass .- 3 or 4.

Black bass .- 3, medium.

Wellow perch. - 6.

Suckers - 1 small.

## PICKEREL.

	Length.	Weight.
Yellow	9 1/2 in.	4 oz.
•	Rule carried	4 "
**	overboard.	6 W
*		3. "
**		4 "
Blue		3 *

Lifted B. 2, b. None gilled. CATCH:-

Herring .- 3 or 4, fair size.

Black bass .- 6, good size.

White bass .- 3.

Sheenshead .- few.

Suckers .- 1, good size.

<u>Pickerel</u>.- About 20 lbs. all No. 2's mostly yellows, few saugers and blues.

Perch .- few.

Lifted B. 1, b. 4 or 5 small pickerel, gilled while lifting. Pushed through mesh into water.

CATCH: -

Black bass .- 6, good size.

Herring .- 12, fair size.

White bass .- few.

Suckers .- 3.

Sheepshead .- Few, small.

Mooneye .- Few.

Bullheads .- 1, weighed 1 lb. 9 oz.

No. 2 pickerel with a few saugers .-

About 15 lbs. Several weighing between 3 and 5 oz.

Lifted A. 3 b. Small catch, not over 12 lbs. in all. None gilled.

CATCH:-

Black bass .- 1, 1 1/4 lbs.

Herring -- 2 small, weighing 5 and 7 oz.

respectively.

Suckers .- 2, 3/4 lb. and 1 lb.

Saugers .- 4, small.

Yellow pickerel .- 5 or 6 lbs. all small.

Lifted A. 2, b. Small lift. None gilled.

Catch:

: Herring. - 9, two small.

Perch.- 2.

Sheepshead .- 2 or 3.

Mooneye .- 2 or 3.

Whitefish -- 1 (2 3/4 lbs.).

No. 1 pickerel. - 1 (4 1/2 lbs.).

No. 2 pickerel .- few, 3 very small,

weighing 4 to 6 oz. These were thrown overboard, dead, because I laid aside to weigh them

The total catch from the 15 pounds to-day was estimated as follows:-

Whitefish	30	lbs.
Black bass	<b>4</b> 5	lbs.
White bass	30	¥
Herring	275	*
No. 1 pickerel	125	w
No. 2 pickerel and saugers	200	*
Mullet	35	W
Carp	15	u
Catfish	20	**
Total	915	*

Great numbers of little minnows were in most of the cribs to-day, escaping while the nets were being lifted.

May 18. Very stiff S. W. breeze, heavy sea.

Observed lifting of following nets:

Lifted C. 2, b. Gilled before lifting: Side d. 1 herring, 11 in. 1/2 lb.

Side a. 11 herring, (12 1/4 in. 3/4 lb.; 12 1/2 in. 1 lb.; 12 1/2 in. 3/4 lb.; 13 in. 1 lb.; 12 1/2 in. 14 oz.; 11 1/2 in. 3/4 lb.; 12 in. 3/4 lb.; 12 in. 3/4 lb.; 12 in. 3/4 lb.; 13 in. 1 lb.; 12 in. 3/4 lb.; 12 l/2 in. 15 oz.; 13 in. 1 lb). One herring was soft and called rotten by the men. A/1 were dead but two.

Gilled while lifting on b side:

2 white bass; 3 yellow pickerel (13 in. 3/4 lb.; 12 3/4 in. 1/2 lb.; 11 in. 8 oz. -this last was the smallest pickerel in the net --); and 2 herring (12 1/2 in. 1 lb.; 12 in. 3/4 lb.).

About 6 minutes was required to release the gilled fish, one of which had to be torn out of the mesh. One herring was caught in the gills, the others some distance behind the gill openings.

#### CATCH:

Amounted to about 65 lbs. There were about 40 herring, all large; 2 suckers;

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few sheepshead; a number of white bass; a few pickerel; 2 or 3 perch, and 2 mooneye.

The largest herring measured 15 1/2 inches and weighed 1 3/4 lbs. A number of them were almost as large, and they would average over a lb. The net contained no small fish and I saw none escape while lifting.

Lifted C. 1, b. None gilled before lifting. Gilled while lifting, side b., 1 yellow pickerel 6 oz., and one 4 oz.

CATCH: - About 120 lbs.

Black bass - 6, all good size.

No. 1 pickerel .- 7 or 8.

Suckers .- 2 or 3.

Perch.- 6.

Carp .- 1.

No. 2 pickerel. - (few blues) Not many but a few very small, as (9 in. 3 oz.; 10 in. 4 oz.; 10 in. 5 oz.; and 10 1/2 in. 8 oz).

Herring and white bass made the bulk of the catch, there being about 1/3 as many white bass as herring. There were no noticeably : small herring.

Lifted B. 3, b. None gilled before lifting. Gilled while lifting, on side b:-

4 yellow pickerel weighing 4 to 7 oz.

l herring 4 oz.

1 tiny perch.

All cast overboard.

CATCH: - About 40 lbs.

Catfish .- 1 (4 lbs).

Black bass .- 2, good size.

White bass .- few.

Sheepshead .- few.

Mooneye .- few.

Herring .- constituted bulk of catch.

They were all good size except the one gilled (4 oz.) and the two following, (9 3/4 in. 5 oz.; and 10 in. 6 oz).

Saugers .- 2 or 3 good size.

No. 2 pickerel. few. Only one very small (10 in. 5 oz.).

Lifted B. 2, b. Gilled while lifting one small herring, and 3 pickerel (2 small and 1 good size) all pushed through net into water.

CATCH: -

About 40 lbs. consisting principally of herring. A few pickerel (No. 2), white bass, perch, saugers, sheepshead and mooneye.

The only small fish were one sauger 9 1/4 in. 4 oz.; and one herring 9 in. 4 oz.

The two next smallest herring 11 in. 7 oz. and 10 1/4 in. 7/8 lb.

Lifted B. 1, b. Gilled while lifting, 3 small yellow pickerel/ all pushed through into water.

#### CATCH:-

About 40 lbs., named in order of abundance, herring, pickerel, white bass, and sheepshead. Small fish were as follows:-

Herring. - 2, 10 1/2 in. 7 oz.; and 11 3/4 in. 8 oz.

<u>Tellow pickerel</u>.- 6 (9 in. 4 oz.; 9 in. 5 oz.; 9 1/2 in. 5 oz.; 9 1/2 in. 5 oz.; 9 1/4 in. 6 oz.).

Blue pickerel.- 10 in. 5 oz. and 10 1/2 in. 6 oz.

Lifted A. 3, b. None gilled.

CATCH: - About 35 lbs.

Herring .- bulk of catch.

No. 1 pickerel .- 1.

Suckers .- 1.

Pickerel No. 2 .- few.

Saugers .- Very few.

White bass - 2 or 3.

Sheepshead .- 2 or 3.

## Small fish:-

3 herring (8 1/2 in. 4 oz.; 8 3/4 in.

4 oz.; and 10 3/4 in. 7 oz.).

1 yellow pickerel, 9 3/4 in. 5 oz.

Lifted A. 2, b. None gilled.

## CATCH: -

About 20 lbs., named in order of abundance: herring, white bass, sheepshead, pickerel No. 2, saugers, 1 black bass, and 1 tiny bullhead.

## Small fish:-

1 herring (10 3/4 in. 7 oz.).

1 yellow pickerel (10 in. 5 oz.).

1 bullhead (3 oz.).

Lifted A. 1, b. Gilled before lifting 1 sauger, 8 oz. Gilled while lifting, 2 small white bass and 2 saugers (3 and 5 oz.).

#### CATCH:

About 25 lbs., mostly herring. Few white bass, pickerel, sheepshead, and mooneye.

Two small herring (8 1/4 in. 3 oz. and 8 1/2 in. 4 oz.).

No minnews were seen in the pounds to-day.

The total salable catch from the 15 nets

to-day was:

White bass	25	lbs.
No. 2's (2/3 yellow pickerel 2/9 saugers, 1/9 blue)	250	17
No. 1 yellow pickerel	75	*
Whitefish	25	w
Herring	370	Ħ
Black bass	35	*
Catfish	12	w
Suckers	15	• `
Perch	20	*

A S. W. gale of wind blew all day and night.

May 19. Wind heavy from S. W., hard rain. I went down to the boats, but it rained so hard I did not go out. The men were instructed to count the gilled fish. On returning they reported one or two small pickerel gilled in the ordinary nets and catch lighter than yesterday. The F. C. net contained about 30 herring. Seven large ones were gilled on side a.

I saw the markings on the gilled herring which showed they were caught about the middle of the body.

The total catch from 15 nets was as follows:

Whitefish, 3 (2 lbs., 3 lbs. and 7 lbs.)	, 12	lbs.
Herring	230	W
Black bass	10	•
No. 1 yellow pickerel	45	*
No. 2's (2/3 yellow, 2/9 saugers, 1/9 blue, a number of them		
very small)	210	₩ .
White bass	20	Ħ
Suckers	13	77
Perch	8	•

Very little trash, culled out before reach-

ing the wharf.

Temperature of water 56° F.

Day cleared about 10 A. M., then fair, with gentle N. E. breeze.

May 20. Cloudy, cold, stiff N. E. breeze.

Too much wind and sea to lift the outer and eastern string of nets; only 12 pounds lifted to-day. I saw the following nets fished:

Lifted C. 1, b. Two yellow pickerel,

3 and 5 oz., gilled in bag while lifting.

### CATCH: -

Catfish, 1 (5 lbs.).

Black bass, 1 (2 lbs.).

Gar pike, 2 (one large and one small).

White bass, 9 (good size).

Herring, 5 (1 lb., 1 1/8 lbs., 9 in. 5 oz.

9 in. 5 oz., 9 1/4 in. 5 oz.).

No. 2 yellow pickerel, few, (smallest 10 in. 5 oz.).

Sheepshead, 6, (small).

Mooneye, 5.

Lifted C. 2, b. (F. C. net). Gilled before lifting, side c, 3 herring (13 in. 1 lb.

l oz.; 12 3/4 in. 15 oz.; 12 1/2 in. 15 oz.), two dead, one alive. On side a, 2 herring, both dead (13 in. 1 lb. 1 oz.; and 11 in. 9 oz.). Gilled in bag, while lifting, 1 white bass and 2 pickerel (12 3/4 in. 10 oz., 12 1/2 in. 9 oz.).

CATCH: -

Catfish, 3, two very large, one medium. No. 1 yellow pickerel, 13.

Suckers, 2.

Herring, 35 (none small).

Sheepshead, 3.

No 2, yellow pickerel, 3 (not small).

White bass, 6.

Whitefish, 1 (3 lbs. 2 oz.).

Mooneye, 4.

The stiff eastern current evidently caused the 3 herring to gill in c side.

Lifted B. 1, b. Gillwed while lifting 2 small pickerel on b side.

### CATCH:

Herring, 15, smallest 11 1/2 in. 8. oz. others large.

Catfish, 1, small, but not unmarketable.
Black bass. 2. good size.

Rock bass, 1.

Perch. 3.

Suckers, 1.

White bass, 3.

Sheepshead, 4.

No. 2:

Saugers, 4.

Blues, 5.

Yellows, 11.

# Small fish:

Yellow pickerel .-

8 1/2 in. 3 oz.

9 3/4 " 4 "

10 \* 4 \*

10 1/2 " 6 "

10 3/4 " 6 "

Lifted B. 2, b. Gilled before lifting on side c, one 7 oz. yellow pickerel. Head was pulled off to release.

Gilled on b side while lifting, one sauger 6 oz.

### CATCH: -

Herring, 23.

Catfish, 1.

Sheepshead, 2 or 3.

No. 1 yellow, 1.

Black bass, 1.

White bass, 2.

No. 2, 40.

Small fish:

Six herring .-

8 3/4 in. 4 oz.

9 \* 3 \*

9 1/2 " 5 "

10 \* 6 \*

10 1/4 " 6 "

10 1/4 " 6 "

The two smallest of these herring were thrown overboard, the others saved.

Smallest pickerel was 10 in. 5 oz. There were 7 or 8 others, about the same size.

Lifted B. 3, b. Gilled in bag while lifting 5 small pickerel. These were shaken out.

CATCH: -

Herring, 39.

No. 2, 50 (only a few saugers and blues).

Sheepshead, 4 or 5.

Small fish:

Four herring .-

8 1/2 in. 3 oz.

8 1/4 " 4 "

9 1/4 " 5 "

7 #

Two smallest thrown overboad.

Four yellow pickerel .-

 $8 \frac{3}{4} in. 3 oz.$ 

9 1/2 \* 5 \*

7 \*

7 \*

Smallest one thrown overboard.

Lifted A. 1, b. One small pickerel gilled while lifting. One dead pickerel in the net.

#### CATCH: -

Black bass, 1, good size.

Carp, 1.

Sheepshead, 3, one very large.

Perch, 2 small.

Herring, 23.

No. 2 yellow, few.

# ; Small fish:

Six herring too small for market, but

all were retained.

One yellow pickerel, 8 1/2 in. 3 oz.

Lifted A. 2, b. Gilled before lifting, one small pickerel, side d, and one small perch, side d.

CATCH: -

No. 2, yellow. 5.

Black bass, 3 (smallest 11 in. 15 oz.).

Perch, 1.

Herring, 7.

Small fish:

Three herring .-

9 in. 5 oz.

9 1/4 " 5 "

About same size.

Lifted A. 3, b. None gilled.

CATCH: -

Herring, 17.

Black bass, 2.

Perch, 2.

No. 2 yellow, few.

Suckers, 1.

Sheepshead, 3.

White bass, 3.

## Small fish:

Sturgeon

Five herring .-

8 in. 2 oz.

8 1/2 " 3 "

8 3/4 " 3 "

9 1/2 " 5 "

9 1/4 " 5 "

The three smallest were discarded.

Three pickerel, weighing between 4 and

6 oz. Two discarded.

The toal catch from 15 pounds to-day (3 nets fished two days) was the smallest since I have been here.

Whitefish,	2	1/2 lbs.	(1 fish)
Herring	160	*	
Black bass	15	*	
White bass	. 15	*	
No. 1 pickerel	50	*	
No. 2's	320	•	
Sturgeon			
Suckers	few		

15

\* (1 fish).

May 21. Day clear, cold. Light airs from east and northeast. Saw the following pounds fished:

Lifted C. 1, b. None gilled.

CATCH: -

Herring, 2.

Carp, 1.

Black bass, 3.

Suckers, 1.

Perch, 1.

Mooneye, 4.

White bass, 7.

Sheepshead, 4.

No. 2 yellow, 3.

Saugers, 1.

No small fish.

Lifted C. 2, b. (F. C. net). Gilled before lifting:

Side a, 3 herring, one alive (13 1/2 in. 1 lb. 3 oz.; 12 1/2 in. 1 lb.; and 12 1/2 in. 15 oz.).

Side c, 1 herring, dead ( 12 in. 3/4 lb.).

These herring had run into the mesh nearly half the length of their body, and it required about 3/4 minute to extricate them.

Gilled while lifting, 10 sheepshead in the bag, 2 minutes consumed in liberating them.

#### CATCH: -

Herring, 12.

No. 1 yellow, 7.

White bass, 14.

Black bass 1.

No. 2 yellow. 2.

Saugers, 1.

Suckers, 1.

Sheepshead, about 20 lbs. small.

# Small fish:

1 herring, 10 3/4 in. 8 oz.

1 sauger, 10 in. 5 oz.

Lifted B. 1, b. Gilled before lifting:

a. d. corner, 1 sauger, 9 3/4 in. 4 oz.

b. c. corner, 1 pickerel, about same size.

Gilled in the bag while lifting 6 pickerel

4 to 9 oz. 1 1/2 minutes required to liberate.

# CATCH: -

Herring, 28.

Black bass, 5.

White bass, few.

Rock bass, 1.

Saugers, 3.

No. 2 yellow, about 8 lbs.

Sunfish, 1.

Suckers, 1.

No. 1 yellow, 4.

No. 1 blue, 1 (1 1b. 6 oz.).

Small fish:

Two herring (8 1/2 in. 6 oz. and 10 1/2 in. 5 oz.).

One sauger (10 in. 5 oz.).

Four yellow pickerel (9 1/4 in. 4 oz.;

10 in. 5 oz.; 10 1/4 in. 6 oz.;

10 1/4 in. 6 oz.).

One blue pickerel (10 in. 4 oz.).

Lifted B. 2, b. Gilled while lifting:

One blue pickerel, 3 oz. in bag.

One yellow pickerel, 5 oz. in bag.

CATCH: -

Herring, 19.

Black bass, 2.

White bass, few.

Suckers, 3.

Sheepshead, few.

Saugers, several.

No. 2. yellow, about 20 lbs.

No. 2 blue, several.

No. 1 tellow, 1.

Catfish, 1.

### Small fish:

Ten yellow pickerel about same size,

3 of which were of these dimensions. -

- 9 1/2 in. 4 oz.
- 9 1/2 " 5 "
- 9 3/4 \* 5 \*

Three herring .-

- $8 \frac{3}{4} \text{ in. 4 oz.}$
- 9 1/2 \* 6 \*
- 9 3/4 \* 7 \*

Lifted B. 3, b. Gilled in bag while lifting:

1 yellow pickerel, 6 oz.

1 herring, 4 oz.

One-half minute consumed in liberating.

### CATCH: -

Sturgeon, 1 (7 lbs.) retained.

Herring, 17, all smaller than usual.

Perch, 2, unusually large.

Black bass, 4.

No. 2's, about 20 lbs.

Suckers, 2.

Sheepshead, about 8 lbs.

Mooneye, 5.

Small fish:

Ten herring, not weighing over 1/2 lb. each, 1 weighed 3 oz.

Six or 7 pickerel weighed 1/2 lb. and under, the smallest (4 oz.) was not retained.

Lifted A. 1, b. Gilled before lifting, 1 yellow pickerel, 4 oz. on side c. Gilled in bag while lifting, 1 herring, 4 oz.

CATCH: -

Catfish, 1 (3 1/4 lbs.).

Black bass, 7.

Herring, 26.

Perch, 2.

Rock bass, 1.

Suckers, 1.

No. 2's, 13, averaging 10 oz., none less than 1/2 lb.

Lawyer, 1, small. One of the men killed it before throwing overboard.

Small fish:

Black bass, 1, 10 in. 8 oz.

Herring, 4 .-

9 1/2 in. 7 oz.

9 \* 6 1/2 oz.

Other two about same size.

Lifted A. 2, b. Gilled before lifting in a. d. corner, 1 small yellow pickerel. Gilled while lifting:

c. d. corner, 1 small pickerel.

b. side, 1 sauger (4 oz.).

There were a great number of minnows in the net which escaped during lifting. Water unusually clear.

CATCH: -

Herring, 13.

Perch, 1.

No. 2 yellow, 7.

Saugers, 1.

White bass, 3.

She epshead, 13.

Small fish:

Two pickerel, 4 to 6 oz.

Lifted A. 3, b. None gilled.

CATCH: -

Sturgeon, 1 (3 lbs. 12 oz.) discarded

alive).

Perch, 2.

Suckers, 1.

Black bass, 4.

White bass, 2.

No. 1 yellow, 1.

No. 2 yellow, 7.

Herring, 15, none small.

Sheepshead, about 20 lbs. small.

## Small fish:

Two yellow pickerel, 4 and 5 oz. One blue pickerel, 3 oz.

May 22. Clear. Good stiff breeze from the

S. W. Very cold. The men say it is colder

than they ever knew it before at this season.

Observed lifting of following nets:

Lifted C. 2, b. (F. C. net). Before lifting gilled:

Side c, 1 herring (11 in. 7 oz).

Side a, i small sheepshead.

While lifting gilled in bag:

1 blue pickerel (13 1/4 in. 3/4 lb.).

5 yellow pickerel (13 1/2 in. 9 oz.; 13 1/2 in. 15 oz.; 13 in. 10 oz.).

1 herring (11 3/4 in. 15 oz.).

2 white bass (1/4 lb.).

Three minutes consumed in releasing these fish.

## CATCH:-

Herring, 13.

Black bass, 2.

Rock bass, 1.

White bass, 20.

No. 1 blue, 4.

No. 1 yellow, 2.

No. 2's, 21, (1/3 blues) all good size.

Catfish, 1.

Suckers, 5,

Mooneye, 2.

Sheepshead, few.

Small fish:

1 herring (6 oz.).

Lifted C. 1, b. Gilled while lifting 1 yellow pickerel, 4 oz.

CATCH: -

Herring, 8.

Black bass, 3.

White bass, 14.

No. 1 yellow, 3.

No. 2, 15.

Perch, 1.

Suckers, 2.

Sheepshead, 11.

Mooneye, 4.

Small fish:

1 herring, 9 in. 6 oz.

2 yellow pickerel, 10 1/2 in. 4 oz.; 11
in. 6 oz.

Lifted B. 3, b. Gilled in bag while lifting:

4 yellow pickerel, 4 to 6 oz.

1 small sauger.

1 1/2 minutes consumed in liberating.

CATCH: -

Herring, 9.

Black bass, 2.

White bass, 21.

Perch. 4.

No. 1 yellow, 2, one weighed 6 lbs.

No. 2, yellow, 53.

No. 2, blue, 20

Saugers, 9.

Suckers, 5.

Sheepshead, 31.

A few of the pickerel were too small for market, but all were retained.

Lifted B. 2, b. Gilled while lifting:

2 small yellow pickerel.

1 blue pickerel (4 oz.).

### CATCH: -

No. 1 yellow, 2.

No. 2, about 40 lbs.

Herring, 13.

Perch, 3.

Suckers, 3.

White bass, 5.

Sheepshead, about 15 lbs., mostly small.

There were about 10 or 12 small pickerel weighing from 4 to 6 oz.

Lifted B. 1, b. Gilled before lifting:

- a. side, 1 sauger, 10 in. 5 oz.
- c. side, i sauger, 10 in. 5 oz.

Gilled in bag while lifting:

l blue pickerel, 5 oz.

CATCH: -

Herring, 11.

Black bass, 1.

Rock bass, 1.

White bass, about half dozen.

Catfish, 2 (one small the other 2 1/2 lbs.).

No. 1 yellow, 1.

No. 2's, about 30 lbs.

Suckers, 2.

Perch, 2.

Sheepshead, few.

Most of the No. 2's were very small.

They would average about 10 oz. Some of the smaller pickerel had following dimensions:

Yellow 10 in 6 oz.

10 5

10 1/2 in. 7 oz.

10 1/2 " 6 "

blue 10 " 5 "

1 catfish weighed 6 oz. and was discarded.

Lifted A. 3, b. Gilled in bag while lifting, 1 sheepshead, small.

CATCH: -

Herring, 1.

No. 1 yellow, 3.

No. 2, about 25 lbs.

Catfish, 2, one weighed 1 3/4 lbs and measured 15 inches.

Saugers, 14.

Suckers, 2.

Sheepshead, about 35 lbs., all small.

White bass, 2.

Perch. 2.

Black bass, 1.

Small fish:

l catfish, about 6 oz. thrown over board alive.

5 or 6 saugers, weighing 4 to 6 oz.

Some small pickerel, weighing 4 to 7 oz.

Lifted A. 2, b. None gilled. Very small lift. This pound never does very well.

CATCH: -

Herring, 7.

Black bass, 3.

White bass, 1.

No. 2, few.

Mooneye, 3.

Sheepshead, few.

3 small pickerel

Lifted A. 1, b. None gilled.

CATCH: -

Black bass, 1.

White bass, few.

Herring, 7.

No. 1 yellow, 1.

No. 2 yellow, 5.

No. 2 blue, 2.

Mooneye, 2 or 3.

Sheepshead, 25 or 30 lbs.

Small fish:

2 yellow pickerel.

There were very few herring in the pounds to-day, but they were of very fair size. While

the western strings did better fishing than usual to-day, the eastern strings caught scarcely anything.

Total catch for 15 pounds to-day was:

Whitefish	7	lbs.	(3	fish
No. 1 yellow	75	tr		
No. 2 yellow and blue	<b>4</b> 80	Ħ		
Herring	140	w		
White bass	50	•		
Black bass	15	**		
Catfish	7	*		
Suckers	25	#		

The wind lulled toward noon, and day became warmer.

At 2.30 P. M., temperature air 65°, temperature water at surface 57° F.

May 23. Day clear, warmer, good breeze from the S. W. Saw the following pounds fished:

Lifted C. 2, b. (F. C. Net).

# Gilled before lifting:

Side a, 1 herring, 13 in. 1 lb. (dead).

3 blue pickerel, 13 in. 11 oz.

13 \* 10 oz.

13 1/2 in. 11 oz.

l yellow pickerel, 13 1/2 \* 12 \* Side c, 6 herring (3 alive) :

12 1/2 in. 1 lb.

13 1/2 " 1 " 2 oz.

13 " 1 "

13 " 1 " 1 "

11 1/2 ". 9 "

12 1/2 " 11 '

Side d, 1 herring (dead) 10 1/2 in. 8 oz. Gilled while lifting:

Side d, 37 fish. 70 per cent pickerel 25 per cent herring, 2 sheepshead and 1 white bass. 5 1/2 minutes were consumed in relieving the gilled fish. Following are dimensions of some of these gilled fish:

Herring,  $9 \frac{1}{2}$  in. 5 oz.

-. •

10 \* .7 \*

10 1/4 " 7 "

10 1/2 " 8 "

10 3/4 \* 7 \*

11 \* 8 \*

All the herring gilled were about these sizes.

## Pickerel:

Yellow 13 1/2 in. 12 oz.

13 1/2 " 13 "

13 1/2 " 13 "

13 \* 13 \*

Blue 13 " 10 "

12 3/4 \* 10 \*

Gilled yellow in proportion to blue was about 4 to 1. All the gilled pickerel were alive.

#### CATCH: -

Whitefish, 2 lbs. 9 oz. (1 fish).

No. 1 pickerel/8 fish (1 1/4 - 2 1bs).

No. 2 pickerel, 38.

Herring, 41.

Catfish, 2.

White bass, 8

Sheepshead, 4 or 5.

Suckers, 2.

All the b. side gilled herring were rather small, those not gilled were large.

Lifted C. 1, b. None gilled.

### CATCH: -

Sturgeon, 1 (about 90 lbs.) female.

Catfish, 1 (3 lbs.).

Carp, 1, large.

Black bass. 1.

White bass, about 15 lbs.

Perch, 2.

Saugers, 2 or 3.

Herring, 3 good size.

No. 2 pickerel, 4 (1 blue).

Mooneye, 2 or 3.

Sheepshead, 6 or S.

Small fish:

Blue pickerel, 10 1/4 in. 4 oz.

Yellow pickerel 9 1/4 in. 4 oz.

10 \* 5 \*

Lifted B. 3, b. Gilled while lifting:

34 pickerel and saugers. These fish did not get well into the meshes as the pickerel did in the Fish Commission net, they only got their heads in. Following are dimensions of some of them:

Saugers 9 in. 4 oz.

9 \* 4 \*

9 1/2 \* 5 '

91/2 " 4 "

Yellow pickerel 10 1/4 in. 5 oz.

11 \* 7

10 1/2 " 5 "

Required 4 minutes to relieve them. CATCH:-

Herring, few )
White bass, few )
No. 2 pickerel )
Saugers )

Sheepshead, very few.

Mooneye, very few.

Black bass, 1.

Perch, 1.

Lifted B. 2, b. Gilled before lifting:

a. side, l small pickerel.

Gilled in bag while lifting:

3 small pickerel.

CATCH: - (About 75 lbs.).

Pickerel, herring, white bass, and saugers, in order named, made up the catch. There were also 2 black bass, 2 suckers, 1 catfish, and 2 or 3 sheepshead.

3 or 4 small, 4 oz. pickerel were dis-

and 6 oz. retained. The small fish were not carefully sorted out. The discarded were merely noticed by one of the men and thrown overboard.

Lifted B. 1, b. Seventeen pickerel gilled in the bag while lifting. 1 minute consumed in releasing them. Following are dimensions of a few of them:

Blue pickerel 12 1/4 in. 7 oz.

Yellow pickerel 9 3/4 \* 5 \*

10 \* 5 \*

10 3/4 \* 5 \*

CATCH: -

Catfish, 4.

Black bass, 3.

Herring, 1/3 ) 200 lbs.

Pickerel 2/3

White bass, few.

Sheepshead, few.

Suckers, few.

Lifted A. 3, b. None gilled.

### CATCH: -

Catfish, 5 (2 thrown overboard, one weighed about 1 lb., the other less).

Black bass, 3.

Perch, 2.

No. 1 yellow, 1.

No. 2, about 12 lbs.

Herring, 10.

Sheepshead, few.

Mooneye, few.

## Small fish:

Four herring .-

8 1/2 in. 3 oz.

8 3/4 " 4 "

9 \* 4 1/2 oz.

9 3/4 \* 6 oz.

10 yellow pickerel weighing from 4 to 6 oz.

Lifted A. 2, b. There was one dead herring weighing 6 oz. floating round inside the pound. None gilled.

CATCH: - About 15 lbs., nearly all herring.

: In addition there were:

Perch, 1.

Suckers, 1.

White bass, 2.

Mooneye, 3.

Sheepshead, 4 or 5.

## Small fish:

10 herring as follows:

8 3/4 in. 4 oz.

8 3/4 4 4

9 \* 4 "

9 \* 4 \*

9 1/4 " 4 "

9 1/2 " 4 "

9 \* 3 1/2 oz.

8 3/4 \* 5 oz.

9 1/4 \* 5 \*

8 3/4 " 4 "

Lifted A. 1, b. Gilled while lifting:

- 6 yellow pickerel.
- 1 blue pickerel:
- 2 sheepshead.

Most of these fish had gotten pretty far into the meshes. The men were in a hurry so pushed all these fish through into the water except two, one of which was a blue pickerel, weighing 3/4 lb. and the other a small yellow

which was caught so fast one of the men had to pull its head off in order to relieve it.

CATCH: -

About 30 lbs., mostly herring.

In addition to herring there were:

No. 1 yellow, 1.

No. 2. few.

Catfish, 1.

Perch, 2.

Mooneye, few.

Sheepshead, few.

Small fish:

- l sauger.
- 3 herring.
- 5 pickerel.
- 3 of the pickerel did not weigh over 3 oz. These were thrown overboard.

The pounds I saw lifted to-day did better than usual, but the lower and western nets caught very few, and those few were small. In all they only had about 1/2 box pickerel, half of which were undersized, and about 1/2 box of herring, 1/3 of which were very small.

The total catch for the 15 pounds to-day was:

Whitefish		2	lbs.(1 fish)
No. 1 yellow picke	rel	60	Ħ
No. 2 yellow and b	lue 6	550	*
Herring	2	285	W
Black bass		10	*
White bass		25	•
Catfish		22	•
Carp		10	¥
Suckers		<b>2</b> 5	#
Sturmeon	about	90	" (1 fish).

May 24. Day warm and clear. Calm. Saw the following pounds lifted:

Lifted C. 1, b. Gilled while lifting,

4 small pickerel, 3 to 4 oz. Pushed through the twine into water.

## CATCH: -

Sturgeon, 1, female, about 75 lbs.

Carp, 1.

No. 2 pickerel, 32 (5 blues, the rest yellow).

Saugers, 3.

White bass, 16.

Perch, 1.

Herring, 2 (one 12 3/4 in. 3/4 lb.; other small).

Suckers, 1.

Sheepshead, few.

Mooneye, few.

### Small fish:

1 herring, 9 inz 5 oz.

8 pickerel, one 9 1/2 in. 3 oz., others about same size, not over 4 oz.

Lifted C. 2, b. (F. C. net). Required 12 minutes to lift, 6 of which were consumed in releasing gilled fish.

Gilled before lifting, 14 herring;

a.	d.	corner,	1,	11	3/4	in.	3/4	lb.
----	----	---------	----	----	-----	-----	-----	-----

Side a. 8,  $13 \ 3/4 \ * 1 \ 1b. 4 \ *$ 

13 1/4 \* 1 \* 2 \*

12 3/4 " 1 "

12 3/4 \* 1 \*

12 14 1

12 " 12 "

11 3/4 " 13 "

11 3/4 \* 12 \*

Side c. 11 in. 9 oz.

13 " 1 1b.

13 1/4 " 1 " 1 "

Five of the 14 gilled herring were alive.

The heads of two gilled herring were badly

torn in extracting them. Most of these her
ring had been caught about the middle of the

body. The scales were rubbed off and some

of them considerably bloated and disfigured.

While lifting 21 fish were gilled:

1 10. 9

3

5 white bass, about 1/2 lb.

# 13 pickerel:

Smallest 13 in. 9 oz.

Largest 21 in. 1 1/4 lbs.

The 13 in. pickerel was the smallest in the net. Next in size was 13 3/4 in. 3/4 lb.

## CATCH: -

Black bass, 2.

Catfish, 3.

Perch, 1.

Herring, about 30 lbs.

White bass, 3.

No. 2 pickerel, about 10 lbs. About all of them gilled while lifting.

Suckers, 3.

Carp. 3.

Sheepshead, few.

Lawyers, 1.

Mooneye, about 10 lbs.

Lifted B. 3, b. Gilled while lifting,

l perch and 8 pickerel. The gilled pickerel,

I judged, weighed about 3 or 4 oz. They were

all pushed through the net into the water, time
inappreciable.

CATCH: -

Catfish, 3.

Herring, about 18 lbs.

White bass, few.

Suckers, 2.

No. 2 pickerel, about 18 lbs.

Sheepshead, few.

Mooneye, few.

Lawyers, 3. Killed first then thrown overboard.

Small fish:

1 catfish, 10 1/2 in. 7 oz. Thrown out alive.

3 herring,

9 3/4 in. 4 oz.

9 1/4 \* 5 \*

9 1/2 " 5 "

Several pickerel, 9 1/4 " 3 "

9 3/4 • 5 "

10 1/2 \* 5 \*

10 1/2 \* 5 \*

There were 4 or 5 more about the same size.

Lifted B. 2, b. Gilled while lifting:

2 saugers, 11 in. 5 oz.

11 1/2 in. 7 oz.

1 sheepshead, 4 oz.

5 pickerel, pushed through the net, but appeared to be 3 - 4 oz. in weight.

#### CATCH: -

Black bass, 1.

Catfish, 1.

Perch, 2.

No. 1, 1.

No. 2, about 15 lbs.

Suckers, 2.

Herring, 11.

Mooneye, few.

Sheepshead, few.

## Small fish:

2 blue pickerel 9 in. 2 oz.

10 1/4 in. 5 oz.

2 yellow pickerel.

4

5 \*

Lifted B. 1, b. Gilled while lifting:

) 4 to 7 oz. 3 saugers ll pickerel

3 1/2 minutes consumed in liberating them. Head of one pickerel was torn off.

## CATCH: -

Catfish, 6.

Suckers, 3.

Carp. 2.

No. 1, 4 or 5.

No. 2, few lbs.

Herring, few lbs.

Black bass, 1.

Perch. 6.

Saugers, few.

Lawyers, 3 (killed before discarded). Sheepshead, 10 or 12 lbs.

Small fish:

2 herring, 9 in. 5 oz.

9 1/2 " 5 "

1 Black bass, 9 3/4 in. 8 oz. discarded.

Nearly all the No. 2 pickerel were small.

The smallest were represented by:

9 3/4 in. 4 oz.

10 3/4 \* 6 \*

They did not average over 7 oz.

Three of the catfish, 1/2 - 1 lb. were thrown overboard.

Lifted A. 3, b. None gilled. Time for lifting 5 1/2 minutes.

CATCH: -

Catfish, 1.

Black bass, 1, very large.

Perch, 5.

Herring, 8.

No. 2, 15.

Mooneye, 9.

Sheepshead, 66.

Small fish:

2 herring, weighing 6 oz. each.

All the pickerel were very small, but only one was discarded. This was the smallest

pickerel I have seen in any net. It weighed 2 oz. or less.

Lifted A. 2, b. Gilled while lifting, 1 pickerel, weighing 3 oz. Discarded. Time for lifting 8 minutes.

CATCH: -

Herring, 8.

White bass, 6.

Perch. 3.

No. 2's, few.

No. 1, 1.

Suckers, 3.

Sheepshead, few (3 large).

Mooneye, few.

The 3 large sheepshead were retained, thrown in with suckers and called "soft".

There were 3 or 4 very small pickerel, 2 of them were thrown overboard, alive.

Tifted A. 1, b. Gilled while lifting:
7 small pickerel, about 4 oz. and one
good sized blue pickerel (12 3/4 in. 10 oz.).

Black bass, 4.

Perch, 5.

CATCH: -

Herring, 11.

Rock bass, 1.

No. 1, 4.

No. 2, few.

Sheepshead, few.

Mooneye, 6 or 8.

## Small fish:

2 herring,  $8 \frac{1}{2}$  in. 3 oz.

5 oz.

Few pickerel, yellow, 10 in. 5 oz. blue, 10 1/4 in. 5 oz.

May 25. Clear, warm, wind south, stiff breeze.

Observed fishing of following pounds:

Lifted C. 2, b. (F. C. net). 17 minutes to lift, 6 of which consumed in relieving gilled fish:

Gilled before lifting, 24 herring, 1 pickerel and 1 sheepshead:

	a. d.	corner	, 1	herring	11	in.	12	oz.
			1	sheepshead			4	*
	Side	đ.	1	herring	10 1/2	Ħ	8	Ħ
	Side	a.	19	Ħ	13 1/2	۳	17	*
<u>.</u>					12 1/2	•	16	*
					12 1/2	*	16	**

12 3/4 in. 16 oz.

12 1/2 • 16 12 3/4 " 16 " 12 1/4 " 12 " 12 1/2 " 15 " 12 3/4 " 16 " 13 \* 18 \* 12 1/2 " 16 " 12 1/2 \* 16 \* 12 3/4 " 16 " 13 16 \* 13 " 17 " 13 \* 15 \* 13 16 **" 16 "** 13 12 3/4 " 19 " 12 1/4 \* 13 \* Side c. 3 herring, 12 1/4 " 16 " 13 16 \* B.c. corner, 1 pick. 13 1/4 \* 12 Gilled while lifting, 1 catfish (2 lbs.) 2 white bass, 1 rock bass (small) and 26 sheepshead (small).

Catfish, 2.

CATCH: -

Black bass, 5.

Rock bass, 1.

White bass, 3.

Herring, 67.

Pickerel, 2 (large).

Perch. 1.

Suckers. 1.

Sheepshead, about 20 lbs.

Mooneye, very few.

Small fish:

2 herring, 9 1/4 in. 4 oz.

10 1/2 \* 8 \*

11 \* 9 \*

Only a very small per centage of the gilled herring were alive, and on the whole they were not so much disfigured as those gilled in this net yesterday.

One herring differed markedly in shape from the others, the head and fore part of the body were very small and scant, while the caudal extremity was broad, thick and rectangular in form. The body did not taper down, but ended abruptly in a short, small, and narrow tail, with a small caudal fin. This herring measured 11 inches and weighed 13 oz.

Lifted C. 1, b. None gilled.

### CATCH: -

Sheepshead, about 80 lbs. small.

Perch, 4 or 5.

Catfish, 2 (good size).

Suckers, 1.

Herring, few.

No. 2 pickerel, 9.

1 small yellow pickerel.

Lifted B. 3, b. 14 minutes to lift. Gilled while lifting:

- 1 small sheepshead.
- 4 small pickerel.

#### CATCH:-

Herring, about 40 lbs.

Rock bass, 1.

Perch, 6.

No. 2 pickerel, .13.

Suckers, 1.

Sheepshead, few.

## Small fish:

- 1 blue pickerel, 4 oz.
- 1 yellow pickerel, 5 oz.
- 1 herring, 9 1/4 in. 4 oz.

Lifted B. 2, b. 11 minutes to lift. Gilled while lifting:

- 1 herring. 4 oz.
- l pickerel, 5 \*
- l sauger, 4 "
- 2 small perch.

## CATCH: -

About 60 lbs., mostly sheepshead and herring. In addition:

Perch, 7.

No. 2, 7.

Black bass, 1.

Carp, 1.

Suckers, 1.

Mooneye, few.

Lifted B. 1, b. 13 minutes to lift. Gilled before lifting:

d side, 2 small pickerel.

1 sheepshead.

Gilled while lifting:

5 small pickerel.

3 small perch.

2 herring, 10 1/2 in. 7 oz.

13 3/4 \* 20 \*

The latter and large herring got into a mesh with a broken bar.

#### CATCH: -

About 100 lbs., consisting principally of herring. In addition there were:

No. 2 pickerel, 12 or 14.

Perch, 12 or 14.

Black bass, 2.

White bass, 3 or 4.

Catfish, 1.

No. 1, 1.

Sheepshead, few.

## Small fish:

2 herring, 9 3/4 in. 5 oz.

9 1/4 \* 4 \*

Lifted A. 3, b. None gilled.

## CATCH: -

About 50 lbs. of sheepshead and perch with a few herring.

Several perch very small.

Lifted A. 2, b. Gilled before lifting, on d. side, i yellow pickerel, 7 oz.

CATCH: -

Black bass, 4.

Herring, 37.

White bass, 4.

Perch. 6.

Sheepshead, about 30 lbs.

No. 2 pickerel, 5.

Suckers, 1.

## Small fish:

2 herring, 4 and 5 oz.

l pickerel, 5 oz.

# Lifted A. 1, b. Gilled while lifting:

5 sheepshead.

1 perch.

### CATCH: -

Herring, about 50.

Perch, few.

Black bass, 6.

No. 1 pickerel, 2.

No. 2 pickerel, few.

Sheepshead, about 40 lbs.

### Small fish:

2 herring, 4 and 6 oz.

2 pickerel, about 4 or 5 o2.

The catch of herring was considerably larger to-day, and that of No. 2 pickerel much

smaller. Notwithstanding the great increase in the trash, the salable fish were larger and better. There were noticeably few undersized fish in the nets.

The total catch from the 15 nets to-day was:

nerring	730 Ibs.
No. 1 yellow	20 •
No. 2's (2/3 blue)	500 *
Black bass	18 *
White bass	<b>2</b> 8 •
Catfish	14 "
Suckers	25 *
Carp	10 *
Perch	30 *

### CATCH: -

Herring

No. 1 yellow, 2 (largest weighed 6 1/4 lbs).

Herring, about 25 lbs.

May 26. Day fair, moderate, wind S. E., good breeze. Saw following nets fished:

Lifted E. 3, b. Gilled while lifting, 1 yellow pickerel, about 7 oz.

No. 2, blue pickerel, about 20 lbs.

No. 2 yellow pickerel, about 9 lbs.

Perch, 11.

Mooneye, 3.

White bass, 3.

Sheepshead, 1.

## Small fish:

4 blue pickerel,	9		in.	3	oz.
	9	3/4	Ħ	4	Ħ
	10		ŧ	4	*
	10		**	4	17
2 yellow pickerel	9	1/2	77	4	
	10		и	4	*
l herring,	9		W	4	tr

Lifted E. 2, b. Time 14 minutes.

Gilled before lifting, 1 sauger, 5 oz. on d.

side. Dead. Pushed through.

Gilled while lifting:

Whitefish, 2 (2 lbs. and 2 lbs. 1 oz.).

Herring, about 35 lbs.

Blues, about 25 lbs.

Yellow, about 8 lbs.

Perch, 15.

Carp. 2.

White bass, 3.

Suckers, 1.

Sheepshead, 2.

## Small fish:

3 herring, 5 oz., 6 oz.,  $3 \frac{1}{2}$  oz.

3 or 4 small blues and yellows.

Lifted E. 1, b. Time 15 minutes.

Gilled while lifting, 1 pickerel, 6 oz.

## CATCH: -

Herring, about 90 lbs.

Blues, about 35 lbs.

White bass, few.

Perch, about 20

Mooneye, 3 or 4.

Sheepshead, 2. (1 large one retained). The blues averaged a good 3/4 lb.

## Small fish:

5 herring, 4 to 6 ox.

2 perch, 2 or 3 oz.

Lifted C. 3, b. Gilled while lifting, .1 herring, 6 oz.

CATCH: -

Herring, about 20 lbs.

Blues, 20 or 30.

Yellows, 15.

Carp, 2.

Perch, few.

Sheepshead, 3 or 4 (1 large).

Mooneye, 3 or 4.

Small fish:

2 herring, 6 or 7 oz.

l pickerel, 5 oz.

Lifted C. 2, b. (F. C. net).

The time was considerable, but it was impossible to calculate it for relieving gilled fish. A foot or so of netting was drawn in, a fish extracted, then a little more drawn in, etc., by 3 men at the same time.

# Gilled before lifting:

Herring,		<b>4</b> 8
Blues	•	3
Yellows		2
Perch		2

56 fish.

1

Gilled while lifting:

White bass

Herring

Pickerel	9
Perch	2
White bass	2
Sheepshead	_1

Total number of gilled fish, 79. Before lifting gilled on:

a.	side,	28	herring	12	oz.	16	oz.	16	oz.
				16	ŧŧ	16	Ħ	12	w
				15	**	17	17	15	*
				16	w	16	*	14	w
				13	*	12	**	18	Ħ
				17	*	11	w	17	•
				16	17	12	•	16	•
				16	*	16	Ħ	16	•

15

23.

More gilled near two corners than in middle.

Two of these herring were soft and rotten, they were thrown overboard. Many were greatly disfigured and discolored, and great majority of them dead.

- 2 pickerel.- 9 oz. 16 oz.
- 1 White bass, 8 oz.
- 1 Perch, 5 oz.

## Before lifting gilled on:

c. side, 20 herring. - 8 oz. 8 oz. 18 oz.

17 16 12 12 18 15 17 15 16 15 8 14 20 12 16 16 17 3 blues .-9 12 12

l perch.- 5 "

The majority of these fish were gilled near the corners. Four of the herring were rotten, and several considerably disfigured.

# While lifting gilled on:

- d. side, 9 herring. These all weighed 1 lb.

  or a little less, except 2 which

  weighed 8 and 9 oz. respectively.
  - 9 pickerel, all weighing from 3/4 to 1 lb.
  - 2 perch, fair size.
  - 2 white bass, fair size.
  - 1 sheepshead, small.

### CATCH: -

Catfish, 4 (1 1/4 lbs., 1 lb. 5 oz., 2 lbs., 1 lb. 3 oz.).

Black bass, 3 (1 1b. 5 oz., 1 1b., 14 oz).

Herring, 74, including gilled. All large.

No. 1 yellow, 7 (1 1/2 to 4 lbs.).

No. 2 yellow, 2 (both 3/4 lb.).

Blue, 17 (12 to 18 oz.).

White bass, 17 (4 to 8 oz.).

Perch, 6 (3 to 12 oz.).

Suckers, 1 (2 lbs. 2 oz.).

Sheepshead, 21 (2 oz. to 4 lbs. 5 oz.).

There were only 4 large ones which were retained.

The great majority of all the herring showed markings which proved they had tried to get through the meshes of the net. Many had evidently been gilled and afterwards worked themselves loose.

Lifted C. 1, b. Gilled while lifting, 1 sheepshead, 4 oz.

CATCH: -

About 80 lbs.

Herring.

White bass.

Pickerel, about 50 or 60.

Sheepshead.

Mooneye.

Perch.

Lifted B. 2, b. None gilled.

CATCH: -

About 40 lbs.

No. 1 pickerel, 1.

Herring, about 25 lbs.

Perch, 3 or 4.

White bass, 3 or 4.

No. 2 pickerel, few.

Sheepshead, few.

Mooneye, 3 or 4.

None small.

# The total catch from 14 nets to-day was:

Herring	96 <b>0</b>	lbs.
Whitefish	4	•
No. 1 pickerel	<b>3</b> 5	•
No. 2 pickerel (3/4 blues)	640	*
Black bass	20	•
White bass	<b>4</b> 5	•

Catfish	10	lbs.
Suckers	30	*
Carp	15	
Perch	50	*

At 2 P. M. to-day a heavy rain squall came up from the S. E., and at 4 P. M. the wind veered to N. W. and blew a gale.

May 27. The wind continued to blow very hard from the N. W. last night and all of to-day. Temperature of air at noon 48° F., at 1 P. M. 51° F. At 3 A. M. to-day Mr. Ditchy said it was too bad to send the men out to lift, but at 9 A. M. they started out without my knowledge.

With Mr. Ditchy's assistance, the total catch from 15 pounds was thus estimated:

Sturgeon, 1 (about 160 lbs.).

Whitefish, 2 (2 lbs. and 1 3/4 lbs.).

Herring, 1520 lbs.

Black bass, 13 lbs.

White bass, 75 lbs.

No. 2, (3/4 blues), 360 lbs.

Suckers, 15 lbs.

No. 1 yellow, 6 lbs. (4 fish).

No. 1 blue, 4 lbs. (1 fish).

Perch, 1 lb. (4 fish).

There were a good many small No. 2 pickerel weighing from 4 to 6 oz., and a few small herring.

The best catches were taken from C. 3, and B. 3. The Fish Commission net caught as many as any of the rest of the nets and more than some.

About 100 herring caught in F. C. Net.

Gilled before lifting in the Fish Commission net, 50 odd herring and a few blues.

Gilled while lifting, in the Fish Commission net, a few herring and a few blues.

Gilled in some of the ordinary nets, a few blues, but no herring.

Gilled before lifting in the F. C. Net: Side a, 10 herring.

Side c, 40 odd herring.

Gilled while lifting in F. C. net:

Side d, a few herring and a few blues.

Very few pickerel in the F. C. net, and a good many in the nets in the same string on

each side of it.

Were being bailed out of the boat, and the smallest gilled herring I found weighed 14 oz., and the largest 1 lb. 5 oz., while the great majority of them weighed exactly 1 lb. each.

There were several, however, weighing over 1 lb. In talking with Mr. Ditchy, 3 or 4 herring, weighing 1 1/4 lbs. that had been held in the meshes over the middle of the dorsal fin, were discussed, and Mr. Ditchy argued that if these large herring were so gilled, it was fair to assume that a number of good herring could and did escape through the meshes of the net.

Mr. Ditchy and all his men, frequently assert also, that good sized pickerel can and must escape through the meshes of the net. As far as this is concerned I can only saw that no small pickerel are taken in this net, and that there are less good sized pickerel taken in it, than in the other nets surrounding it.

Except very small minnows, no fish of any kind has been seen to go through the meshes of the F. C. net.

Mr. Ditchy has remarked for several days past, that he is sorry he put the F. C. net

in its present location as he feels confident he is losing a number of good fishes.

May 28. Day clear, moderate breeze from the S. E. Yesterday's N. W. storm appears to have driven all the herring away from the island as the catch this morning was very light. Each of the upper eight nets, including the Fish Commission net, had about 25 lbs. of herring, the lower and eastern nets did not have so many.

Gilled before lifting in the F. C. net:

Side a, 6 herring, 15 oz. to 1 lb. 1 oz.

Side c, 1 herring, 1 lb.

None gilled while lifting.

Nothing gilled, to speak of, in the ordinary nets.

# Total catch from 15 pounds:

Herring	280	1b <b>s</b>
No. 2 (7/8 blues)	400	•
No. 1 yellow	10	*
Black bass	10	•
White bass	6	*
Large sheepshead	. 6	•
Suckers	8	*
Carp	2	•

Catfish

2 lbs.

Perch

1 \*

Small fish:

There were 6 or 8 undersized herring and about 15 small pickerel.

There was very little trash (sheepshead and mooneyes) in the nets to-day. A N. W. wind generally drives them out temporarily.

The herring in to-day's catch were much inferior in quality to those caught during the past few days. Many of them were soft, and most of them had a great many scales rubbed off. Every single scale had gone from some of them. This condition was more marked in the upper than lower nets, and was probably due to the strong current and warm water.

The S. E. breeze continued through the night.

Lifted E. 3, b. None gilled.

May 29. Day warm and fair. Moderate breeze from the S. E. Witnessed fishing of the following nets:

#### CATCH: -

Whitefish,  $2 \frac{1}{4}$  lbs. (1 fish).

Herring, 29 in count.

No. 1 pickerel, 1.

Perch. 7.

Blues, about 10 lbs., averaging 12 oz.

each.

Yellow, 5.

Mooneye, 4 or 5.

The herring averaged nearly 1 lb.

The blue pickerel,  $13 \frac{1}{2}$  in. 12 oz.

Small fish:-

1 perch, 6 in. 2 oz.

3 herring,  $8 \frac{1}{2}$  in. 3 oz.

8 \* 3 \*

9 \* 4 \*

1 blue pickerel, 6 1/2 in. less than 1 oz.

The men say this is the smallest pickerel they ever saw in the pounds.

Lifted E. 2, b. None gilled.

### CATCH: -

Herring, about 18 lbs.

Blue pickerel, about 15 lbs.

Yellow pickerel, 3 or 4.

Perch. 3 or 4.

White bass, 1 (7 oz.).

Black bass, 1 (13 oz.).

Mooneye, half dozen.

### Small fish:

1 herring, 8 in. 2 oz.

1 blue pickerel, 9 1/2 in. 4 oz.

1 perch, 6 1/2 in. 3 oz.

Lifted E. 1, b. None gilled.

## CATCH: -

Herring, about 150 lbs.

Blues No. 2, 6 (count).

Perch, 2.

Yellow No. 2, 4.

White bass, 2.

Suckers, 1 (1 lb.).

Sheepshead, 1 (2 lbs.).

Mooneye, 3 or 4.

### Small fish:

About half dozen herring, 9 in. 6 oz.

Lifted D. 3, b. None gilled.

#### CATCH: -

Herring, about 30 lbs.

No. 2 blue, few.

Catfish, 1 (2 lbs.).

Perch. 3.

Suckers, 1 (4 lbs.).

Sheepshead, 4 (all large, and retained).

Mooneye, about half dozen.

### Small fish:

4 herring, weighing about 6 oz.

Lifted D. 2, b. Gilled before lifting:

l sauger, 5 oz.

#### CATCH:

Black bass, 2 (good size).

Herring, about 20 lbs.

Whitefish, 1 (5 3/4 lbs.).

Perch, 5.

White bass, 3.

No. 2 blue, 10 (9 to 14 oz. except 2 small).

No. 2 yellow, 2 (9 and 11 oz.).

Sheepshead, 2 (large).

#### Small fish:

2 blue pickerel, 6 and 7 oz. respectively.

Lifted D. 1, b. Gilled while lifting:

3 saugers, 9 3/4 in. 4 oz.

10 \* 5 \*

10 1/4 \* 4 \*

3 perch, 3 to 5 oz.

#### CATCH: -

Herring, 5.

No. 2 blue, few.

No. 2 yellow, 3.

Perch, about 2 dozen.

Suckers, 1 (3 lbs.).

Sheepshead, 4 or 5 small.

### Small fish:

2 perch.

1 yellow pickerel, 5 oz.

## Lifted C. 3, b. Gilled while lifting:

1 small pickerel

)pushed through net.

1 small perch

## CATCH:-

About 80 lbs. of sheepshead and mooneye.

The bag of the net was held up while the fish were raised with a dip net, the salable fish sorted out and the rest thrown overboard. The marketable

fish were:

Herring, 12.

Blue pickerel, 19.

Yellow pickerel, 1.

Perch. 8.

White bass, 1.

Sheepshead, 1.

There appeared to be 3 or 4 small herring thrown out with the trash.

Lifted C. 2, b. (F. C. net).

Gilled before lifting:

Side a, 6 herring, 12 1/2 in. 1 lb.

13 1 1

12 3/4 \* 15 oz.

11 3/4 " 1 "

12 " 1 "

Side c, 1 herring, 12 1/4 " 15 " Gilled while lifting:

3 blue pickerel, 13 1/2 in. 12 oz.

13 3/4 \* 12 \*

13 3/4 \* 12 \*

3 white bass, about 1/2 1b.

3 sheepshead, small.

1 herring, 9 oz.

N. B. During the first part of lifting, just after the bottom line of the twine was reached, a blue pickerel went through the twine on a. side, fell into a bunch of twine, was seized by one of the men and handed me. I saw the pickerel go through from start to finish and he accomplished the passage by one or two propelling motions of the tail and without the slightest difficulty. The twine was without break. This pickerel measured 14 3/4 inches, and weighed 1 lb. This is the first fish that has been seen to escape through the meshes of the twine.

#### CATCH: -

Black bass, 7 large.

Catfish, 2 (15 oz. and  $3 \frac{3}{4}$  lbs.).

White bass. 7.

Herring, 31. All large.

Blue pickerel, 9, smallest 12 oz.

Carp, 1.

Suckers, 4.

Sheepshead )
About 20 lbs.
Mooneye )

Among the herring there was one very large one weighing 1 lb. 9 oz.

Lifted C. 3, b. Gilled before lifting:

l sauger, 4 oz.

1 No. 2 yellow, 4 oz.

#### CATCH: -

About 100 lbs. sheepshead and Mooneye, 6 or 8 herring, 1 black bass, and a few blue pickerel.

The herring to-day were in very much better condition than yesterday, and showed no signed of rubbing.

Total catch from 15 pounds to-day was:

Herring	600	lbs.
No. 2 blues	700	*
Whitefish	6	*
No. 1 pickerel	40	•
Black bass	<b>1</b> 5	*
Carp ) : Suckers )	15	•

May 30. Day fair and very warm. Perfectly calm and absolutely no current in the lake.

I saw the following nets fished:

Lifted C. 1, b. Gilled before lifting:
2 saugers, each 4 oz.

l blue pickerel, 3 oz.

# Gilled while lifting:

l yellow pickerel, 4 oz.

1 blue pickerel, 5 oz.

#### CATCH: -

Herring, about 100 lbs.

Black bass, 1 (2 1bs.).

Sturgeon, 1 (7 1/2 lbs.) retained.

Perch. 2.

No. 2 yellow, 4.

No. 2 blue. 3.

White bass, 5.

Carp, 1.

Suckers, 1.

Sheepshead, very few.

Mooneye, about 12.

#### Small fish:

2	nerring,	9	ın.	4	oz.
		9	w	4	•
2	yellow pickerel	9 1/4	*	4	**
		9 1/2	*	4	#
1	blue pickerel	9 1/2	*	4	*

There were about one dozen herring weighing from 6 to 8 oz., the others were all of good size.

Lifted C. 2, b. (F. C. net) There was no wind, or current, in the region of this net yesterday or last night.

Gilled before lifting, 42 herring:

On a. side, 15 herring 12 3/4 in. 19 oz.

11 3/4 \* 13 \*

12 1/4 " 14 "

12 3/4 \* 14 \*

12 \* 16 \*

11 3/4 \* 12 \*

12 1/2 \* 19 \*

12 1/4 • 16 •

12 1/4 \* 15 \*

12 1/4 \* 14 \*

12 1/2 \* 14 \*

12 1/4 \* 15 \*

12 1/4 \* 14 \*

12 1/4 12 1

Nine of the 26 were gilled in the a. d. corner.

On side b., 1 herring, 10 in, 7 oz.

On side c:

26 herring, 12 1/2 in. 14 oz.

12 1/2 14 1

```
12 3/4 in. 15 oz.
12 1/2 * 14
12
     * 12 *
12 3/4 * 12 *
12 1/2 16
13 1/2 * 17 *
13 1/2 " 21 "
11 1/2 *
         11
11 1/2 • 13
10 1/2 * 9 *
10 1/4 *
         10 *
11
  .
          9
13 1/4 * 20 *
11
        9
12
      " 13 "
12 1/4 * 14 *
12
         13 *
13 1/4 * 14 *
11 1/4 " 12 "
12 3/4 16
12 3/4 13
11
         10
11 1/4
         9
11 1/4 *
         10
```

Gilled while lifting, 21 fishes, mostly herring:

Also 2 pickerel (blues), 2 white bass, a few shiners, and 3 or 4 sheepshead.

Some of the herring were as follows:

The two white bass were:

The two blue pickerel:

The gilled mooneye weighed from 6 to 8 oz.

The gilled sheepshead, 4 oz.

CATCH (including gilled fishes):-

Herring, 117 (smallest those mentioned among the gilled herring).

Blues, 9 (smallest 13 oz.).

Yellows, 2 (1 lb. and 1 lb. 3 oz.).

Catfish, 2 (2 1/4 lbs. and 6 1/2 lbs.).

Black bass, 1 (20 oz.).

White bass, 7.

Perch 4 (none very small).

Suckers, 1 (1 1b.).

Sheepshead, 4 or 5.

Mooneye, 12 or 14.

Nearly all the herring gilled before lifting were caught just in front of dorsal fin. With one or two exceptions, those gilled in the bag while lifting, did not get so far in.

18 minutes were consumed in lifting this net, and as well as I could calculate, about 13 minutes to relieve gilled fish. The time was considerably longer than for lifting any other net.

Lifted B. 3, b. Gilled while lifting:

2 herring, small.

7 little perch, 5-6 in. 2-3 oz.

3 pickerel, two 3 - 4 oz., the other  $\frac{1}{1}$  in. 5 oz.

#### CATCH: -

No. 1 yellow, 1.

No. 2 yellow, 2.

No. 2 blue, 35.

Perch. few.

Sheepshead, few.

Mooneye, few.

Black bass, 2.

Herring, about 40 lbs.

Small fish:-

7 pickerel, 4 - 5 oz.

Lifted B. 2, b. Gilled before lifting:

l herring, 12 1/4 in. 14 oz. Caught in a mesh with broken bar.

Gilled while lifting:

3 small pickerel.

CATCH: -

Black bass, 3.

Catfish, 2.

Carp, 1.

Herring

Sheepshead )

Mooneye )

Blues ) About 65 lbs.

No very small fish.

Lifted B. 1, b. Gilled while lifting:

3 small perch.

3 small pickerel (largest 11 3/4 in.

2 small saugers (largest 10 1/4 in.

6 oz.).

```
4 oz.).
     2 small herring, 9 1/4 in. 4 oz.
                      9 1/2 * 4
CATCH: -
  About 120 lbs., mostly blue pickerel
  and herring. In addition:
     Black bass, 2.
     Saugers, 3 or 4.
     Carp, 1.
     Catfish, 1.
     Sheepshead
     Mooneye
Lifted A. 3, b. Gilled while lifting:
     5 perch, 3 - 4 oz.
     3 pickerel, 4 oz.
     1 blue, 6 oz.
CATCH: -
  Blue pickere1
  Herring
  White bass
                       About 75 lbs.
  Perch
  She epshead
  Mooneye
```

Catfish, 2, 9 1/2 in. 5 oz.)
10 1/4 \* 8 \*)

Lifted A. 2, b. Gilled while lifting:
5 little perch.

CATCH: -

Herring, 6.

Blues, 2.

Sheepshead )
About 35 lbs.
Mooneye )

Lifted A. 1, b. Gilled before lifting:

- 1 4-oz. sauger, tail outside, head
   inside the net.
- l large herring gilled in a broken
  mesh.

Gilled while lifting:

- l sauger, 4 oz.
- 1 white bass, 4 oz.
- 3 perch, 3 4 oz.
- 3 pickerel, 4 5 oz.

Gilled in an area 6 inches square where the twine had been recently mended and the mesh much larger than ordinary:

- 1 herring, 12 3/4 in. 15 oz.
- 3 blue pickerel, large.

#### CATCH: -

About 100 lbs., principally:

Herring.

Blues.

Sheepshead.

Mooneye.

The total catch from 15 pounds to-day was:

Herring	800 lbs.
Blues	500 <b>*</b>
No. 1's	20 *
Suckers	30 *
Carp	18 "
White bass	few.
Black bass	few.

May 31. Day fair and very warm. Calm last night, light S. W. breeze this morning. Saw the following pounds fished:

Lifted C. 2, b. (F. C. net). In all gilled 75 herring, while only 66 were contained inside the net, and some of these showed from markings they had been gilled, but afterwards freed themselves.

Gilled before lifting:

Side a, 52 herring, nearly all dead. 9 1/4 in. 6 oz. 10 1/2 in. 8 oz. 15 oz. 20 oz. 20 oz. 16 oz. 16 oz. 

19 • 15 \* 9 \* 14 4 5 Side b, 6 herring (dead).

19 oz. 14 oz. 15 oz.

12 " 12 " 12 "

1 blue pickerel, 13 oz.

Side c, 16 herring (1 alive).

All these were large herring about same weight as those gilled in side a, except two which had these dimensions:

10 oz.

1/4 in. 5 oz.

This latter is the smallest fish yet
gilled in this net. It was gilled
in the c. d. corner, probably on the
d. side.

Gilled while lifting, b. side:

1 herring,  $10 \frac{1}{2}$  in. 8 oz.

1 sheepshead 5 \*.

The gills of a number of the gilled herring were colorless, but only two of them felt soft.

The gilled herring were held, as usual, about the middle of the body, immediately in front of dorsal fin, and a few, over the fin.

CATCH (including gilled fish):

Herring, 141.

Blues, 5 (smallest 15 oz.).

Suckers, 1.

Black bass, 1.

Perch, 3.

Catfish, 1 (3 lbs.).

No. 1 yellow, 1.

White bass, 2.

Sheepshead, 3.

No small fish.

Lifted C. 1, b. Gilled before lifting:

3 saugers, each 4 oz.; and in a

broken mesh, 1 herring, 12 1/4

in. 13 oz.

```
Gilled while lifting:
     5 perch, 3 - 5 oz.
CATCH: -
  Herring, about 150 lbs.
  Catfish, 1.
  Black bass, 2.
  Carp, 2.
 Perch, 12 or 14.
              ) Very few.
)
  Sheepshead
  Mooneye
There were a few herring as small as:
          9 1/4 in. 6 oz.
There were no blue pickerel in the net.
Lifted B. 3, b. Gilled before lifting:
     1 perch.
Gilled while lifting:
     6 perch
     1 sauger
     1 small herring
CATCH: -
  Herring, about 120 lbs.
  Blue pickerel, about 40 lbs.
  No. 1 yellow pickerel, 1.
```

Catfish, 1.

Perch, about 8 lbs.

No. 2 yellow pickerel, 6 or 7.

Sheepshead )
) few.
Mooneye )

Small fish:

3 herring, 4 - 6 oz.

4 or 5 blues, 4 - 5 oz.

Lifted B. 2, b. Gilled while lifting:

3 perch, 4 - 5 oz. ) Shaken out )
2 herring, 4 and 6 oz. ) of net.

#### CATCH: -

Herring, about 50 lbs.

Blues, about 30 lbs.

Black bass, 3.

No. 2 yellow, 8.

White bass, 6.

Perch, few.

Suckers, 3.

Mooneye, 3 or 4.

Sheepshead, few.

There were a number of unusually large herring in this net, some weighed 1 1/2 lbs.

Small fish:

5 herring.

3 yellow pickerel, 4 oz.

4 blue pickerel, 5 - 6 oz.

2 or 3 perch, 3 - 4 oz.

Lifted B. 1, b. 12 minutes to lift, 1 1/2 of which consumed in relieving gilled fish.

Gilled while lifting:

3 perch.

3 small herring.

2 pickerel, 11 1/2 in. 9 oz.

12 " 9 "

#### CATCH: -

Herring, about 100 lbs.

No. 2 blue, about 40 lbs.

No. 1 blue, 2.

Black bass, 4.

Carp, 1.

Suckers, 2.

Large sheepshead, 2.

Small sheepshead, few.

Mooneye, few.

Perch, few.

In addition to those gilled the small fish were:

3 perch.

2 herring.

Lifted A. 3, b. 13 minutes to lift.

Gilled while lifting:

5 small perch.

l pickerel, 5 oz.

### CATCH: -

Herring, about 60 lbs.

Blues, about 15 lbs.

No. 1 yellow, few.

No. 2 yellow, few.

Perch, few.

Suckers, 2.

Mooneye

Very few.

Sheepshead )

## Small fish:

- 2 or 3 perch.
- 2 herring, 4 oz. each.
- 3 blues, 4 oz. each.
- 2 yellows, 4 oz. each.

Lifted A. 2, b. Gilled before lifting:

In a broken mesh, 1 herring, 12 1/2

in. 15 oz. The mesh was re

Gilled while lifting:

1 3-oz. perch.

placed.

#### CATCH: -

Herring, about 30 lbs.

Blues, about 15 lbs.

Yellow, few.

Perch, about 8 lbs.

Black bass, 1.

White bass, 2 or 3.

Suckers, 1.

She epshead ) few )
Mooneye )

Small fish:

4 or 5 herring, 4 - 5 oz.

2 yellow pickerel.

2 or 3 small perch.

Lifted A. 1, b. 16 minutes to lift.

Gilled before lifting:

l large herring in a broken mesh.

Gilled while lifting:

3 little perch.

2 sheepshead.

#### CATCH: -

Herring, about 70 lbs.

Blues, about 20 lbs.

White bass, 2 or 3.

About 8 lbs.		
28.		
15 manuala de des		
15 pounds to-day was:		
25 lbs.		
80 •		
400 W		
1500 *		
12 •		
30 "		
10 •		
18 •		
25		
r during afternoon was		
92° F. (in shade) and of water 67° F.		
ery warm. Calm last night		
his morning. Saw the		
od:		
Gilled while lifting:		
8 perch )		
) Pushed through net.		
1/2 in. 4 oz.		

# 9 1/4 in. 6 oz.

#### CATCH: -

Herring, about 70 lbs.

Blues; about 50 lbs.

No. 1 blue, 2.

No. 1 yellow, 3.

No. 2 yellow, 6.

Perch, 27.

Rock bass, 1.

Mooneye, 3 or 4.

Sheepshead, 3 or 4.

### Small fish:

3 yellow pickerel, 4 oz.

9 blue pickerel, 10 in. 4 oz.

4 perch.

11 herring, 7 - 9 in. 2 - 5 oz.

Lifted A. 2, b. Gilled while lifting:

1 small perch.

1 yellow pickerel, 10 in. 5 oz.

#### CATCH: -

Herring, 30 lbs.

Mooneye, 15 lbs.

Sheepshead, few.

Catfish, 1 (17 in. 1 3/4 lbs.).

Saugers, 1.

Blues, 7.

Yellows, 4.

Perch. 5.

Small fish:

3 yellow pickerel, one 3 oz. others 4 oz.

1 sauger, 3 oz.

2 or 3 herring, about 5 oz.

Lifted A. 1, b. 13 minutes to lift, 2 of which consumed in relieving gilled fish.

Gilled before lifting:

1 large herring in a broken mesh.

l herring )

) in mended mesh of large size

l perch )

Gilled while lifting:

2 perch, one large.

4 small pickerel.

2 small herring.

#### CATCH: -

Herring, about 75 lbs.

Blues, about 75 lbs.

Yellows, very few.

Saugers, 3 or 4.

Black bass, 1.

Perch, 4 or 5.

Carp, 1.

Suckers, 2.

Sheepshead, few.

Mooneye, very few.

### Small fish:

l yellow pickerel.

Lifted B. 3, b. Gilled while lifting:

- 6 little perch.
- 1 sauger, 4 oz.
- 5 small pickerel.
- 2 herring, each weighing 4 oz.

#### CATCH: -

Herring, 80 lbs., about.

Blues, 70 lbs., about.

Catfish, 1.

Perch, 6 or 8.

Suckers, 3.

Carp, 2.

Sheep shead ) few.

Mooneye )

No small fish observed, except those gilled.

N. B. The fish are all thrown in one side of

the boat and never sorted except when the mooneye and sheepshead are very numerous, in which case the latter are picked out and thrown overboard: the sorting is then not carefully done, however, the object being to get rid of the majority of unmarketable fishes, for it is against the law to throw them overboard at the dock. The rest of the trash culled out at the wharf is thrown back in the boats and cast out during the passage of the boats from the steamboat wharf to Ditchy's fishing shanties on the S. E. point on the island.

It occasionally happens that the trash culled out at the wharf is considerable, in which case the boats carry it out into the lake and dump it.

It will be observed that in view of this throwing of all the fishes from the nets into one side of the boat, it is impossible, when the catch is considerable, for me to pick out all the undersized fishes from each net, so the results heretofore mentioned, and to be mentioned in future, under the caption of small fishes are not altogether accurate,

but are as approximate as possible under the circumstances. I have no doubt that small fishes are very often overlooked and not mentioned in these notes.

Lifted B. 2, b. 14 minutes to lift. Gilled while lifting:

#### CATCH: -

About 200 lbs., 5/8 blue pickerel,

3/8 herring. In addition:

Black bass, 1.

Perch, 3 or 4.

White bass, 2 or 3.

Sheepshead, 3 or 4.

- . Lifted B. 1, b. Gilled while lifting:
  - 1 sauger.
  - 3 perch.
  - 1 sucker, 8 1/4 in. 4 oz. (smallest yet seen).
  - 2 pickerel, 1 large one 13 3/4 in.
    12 oz.
  - 6 small herring in a patch of twine

with broken meshes. Men stopped lifting and mended the twine.

#### CATCH: -

About 200 lbs., 3/8 herring, 5/8 blue pickerel. In addition: 4 or 5 saugers, a few white bass, perch, sheepshead and mooneye.

Lifted C. 2, b. (F. C. net).

Gilled before lifting, 111 herring.

These herring were pretty well distributed on the sides of the net, the majority not being confined in the corners as is more often the 15 of these herring were soft and useless, and were thrown overboard. 3 were absolutely rotten, emitting a very bad odor. Mr. Ditchy frequently claims that a herring cannot become soft and bad in 24 hours, and has heretofore asserted in regard to several herring already found rotten in the net, that they must have been gilled and overlooked when the net was lifted the day previous. certain that the herring had not been overlooked, but still could not convince Mr. Ditchy. To-day the spoiled herring were gilled in conspicuous

places on the sides, and two of them in the middle of the back of the crib which forms the bag when the net is lifted; so these herring gilled and rotted in 24 hours, without the slightest doubt.

Before lifting, gilled on a. side,

51 herring. All of them weighed

over 14 oz. The largest weighed 1

1b. 7 oz.

### Gilled on b. side:

6 herring. One weighed 12 oz., the others over 14. The 12-oz. herring had got well into the mesh, the others were caught in the gills.

## Gilled on c. side:

48 herring.

1 pickerel, 15 oz.

1 perch.

Nearly all of these herring were large, the smallest weighed 12 oz.

## Gilled on d. side:

1 herring, 10 oz.

## While lifting,

Gilled on b. side:

- 4 pickerel, 13 14 oz. each.
- 2 white bass.
- 1 perch.
- 1 sheepshead.
- 5 herring, 20 oz., 15 oz., 14 oz.

12 oz., 9 oz.

#### CATCH: -

Herring, about 180 lbs., including gilled.

Blue pickerel, 5 (all gilled).

Catfish, 2, 3 - 4 lbs. each.

Rock bass, 1.

Carp. 1.

Suckers, 1.

No small fish.

A great many more herring were in the meshes of the net than inside the net, and some of those inside the net showed they had been beally gilled, but got free before or while the net was lifted.

Including time for relieving gilled fish,

18 minutes were consumed in lifting the net.

If it were not for releasing gilled fish, this
net could be lifted in much less time than the

ordinary nets on account of its lighter weight.

I could not make an actual count of the herring inside the net, nor make more weights and measures because this was the last net lifted to-day and there was haste to get the fish off to Sandusky. The fish were not sorted and put on the steamer as usual, but one of Ditchy's sail boats carried them over to Sandusky. There were 1 1/2 tons of fish. The largest catch this spring.

There were about: 1500 lbs. herring.

1200 blue pickerel.

June 2. Day fair and warm. Gentle breeze from the south. Saw the following nets fished:

Lifted C. 2, b. (F. C. net).

Gilled before lifting 60 herring and 2 blues

On side a. 33 herring:

11 1/2 in. 11 oz., 15 oz., 16 oz.,

16 oz., 17 oz., 16 oz., 15 oz.

15 15 16 20 1

16 \* 17 \* 15 \* 13 \*

16 \* 15 \* 16 \* 19 \*

18 \* 16 \* 21 \* 17

15 oz., 16 oz., 15 oz., 14 oz.

15 \* 22 \* 14 \* 14 \*

17 \* 16 \*

On side b. 3 herring:

8 oz. (rotten), 10 oz., 16 oz.

On side c. 24 large herring:

Smallest 12 1/4 in. 13 oz. The others over 15 oz.

2 blue pickerel,  $13 \frac{1}{4}$  in. 14 oz.

13 3/4 \* 15 \*

Six of the gilled herring were soft as mush, but only one rotten.

## Gilled while lifting:

- 1 herring, 13 oz.
- 3 white bass, 7 oz., 7 oz., 8 oz.
- 1 blue pickerel, 17 oz.
- 1 perch, 8 oz.
- 2 sheepshead, 6 oz., 7 oz.

#### CATCH:-

Herring, 35 + gilled 60 = 95.

Blue, 5 + gilled 2 = 7.

Yellow, 1 (1 1b. 7 oz.).

Suckers, 1 (2 3/4 1bs.).

Black bass, 1 (1 1/2 1bs.).

White bass, 7 (8 - 17 oz.) + gilled 3=10.

Catfish, 1 (2 1/2 1bs.).

Sheepshead, 3 + gilled 2 = 5.

The 5 blue pickerel inside the net had the following dimensions:

12 3/4 in. 9 oz.

13 1/4 \* 13 \*

21 "

22 "

24 "

Lifted C. 1, b. Gilled before lifting:

3 herring; two small and one large one held in broken mesh. Mesh was mended. The two small herring, -

8 1/4 in. 5 oz.

8 3/4 \* 5 oz.

Gilled while lifting:

3 perch.

1 white bass.

5 herring, 8 1/4 in. 5 oz.

` 9 **\*** 6 \*

10 1/4 \* 8 \*

10 1/4 \* 8 \*

10 3/4 • 9 •

CATCH: -

Herring, 93 (including gilled).

Black bass, 4.

White bass, about 8 lbs.

Suckers, 1.

Perch, few.

Catfish, 1 (11 1/4 1bs.).

Sheepshead, about 6 lbs.

Mooneye, about 12 lbs.

5 small herring, 6 - 7 oz.

Lifted B. 3, b. Gilled while lifting:

1 yellow pickerel, 10 in. 6 oz.

4 perch, 7 to 7 3/4 in. 4 - 5 oz.

### CATCH: -

Herring, 130 lbs.

Blue pickerel, 50 lbs.

Catfish, 1.

Carp, 2.

Perch, few.

Yellow pickerel, 3 or 4.

White bass, 3 or 4.

Mooneye, plentiful.

Sheepshead, few.

Small fish:

- 2 yellow pickerel.
- 2 or 3 blue pickerel.
- 2 or 3 perch.

Lifted B. 2, b. Gilled while lifting:

- 4 little perch.
- 2 herring, each 4 oz.
- 2 blues, 10 3/4 in. 7 oz. and one
   weighing 11 oz. in a broken mesh.
   Mesh repaired.

#### CATCH: -

Herring, about 60 lbs.

Blues, about 140 lbs. (smallest 9 oz.).

Yellows, 3 or 4.

Perch, few.

Black bass, 1.

White bass, 3 or 4.

Mooneye, very few.

The blue pickerel averaged about 10 oz. in weight, smallest, however, weighing 9 oz.

Lifted B. 1, b. Gilled while lifting:

- l pickerel, 6 oz.
- 6 herring, 4 5 oz.
- 5 perch, 3 4 oz.
- l large white bass in a broken mesh-

#### CATCH: -

Herring, about 80 lbs.

Blues, about 70 lbs.

Yellows, 3 or 4.

Black bass, 2.

White bass, 2 or 3.

Catfish, 1.

Suckers, 5 (1 small weighing 6 oz.).

Perch, very few.

Mooneye, 3 or 4.

### Small fish:

- 1 sucker, 6 oz.
- l blue, 4 oz.
- 1 yellow, 5 oz.

## Lifted A. 3, b. Gilled while lifting:

- l sauger, 4 oz.
- 1 fellow, 5 oz.
- 1 herring, 5 oz.
- 5 perch, 3 5 oz.

#### CATCH: -

Herring, about 60 lbs.

Blues, about 60 lbs.

No. 1 yellow, 2.

No. 2 yellow, 3 or 4.

White bass, 2 or 3.

Perch, very few.

Sheepshead, very few.

Mooneye, 6 or 8 lbs.

#### Small fish:

- 2 yellow pickerel, 3 oz. and 4 oz.
- 3 perch, 3 oz.
- 1 herring, 4 oz.

# Lifted A. 2, b. Gilled while lifting:

6 small perch.

1 pickerel, 6 oz.

1 sauger, 9 oz.

#### CATCH: -

Herring, about 25 lbs.

Blues, about 5 lbs.

Yellow pickerel, 1.

Black bass, 1.

Carp, 4.

Perch White bass

Sheepshead

Mooneye

# Small fish:

2 blue pickerel, 3 oz. and 4 oz.

- 1 black bass, 9 1/4 in. 8 oz.
- 2 or 3 perch, 3 4 oz.
- l yellow pickerel, 4 oz.

The fish were taken, unsorted, to Sandusky in one of Ditchy's sail boats, and one of the men brought back word that the principal fishes summed up from the 15 pounds were:

Herring .					•	1450	lbs
No.	2	blue	picl	cerel		1200	*
No.	1	blue	and	yellow		100	*
Whi	te	fish				5	w

Temperature air to-day 93° F., and of water 72° F.

Lifted A. 3, b. 12 minutes to lift, 1/2 minute relieving gilled fish.

## Gilled while lifting:

- 3 perch, 3 oz., 3 oz., 5 oz.
- 3 pigkerel, 4 oz., 4 oz., 4 oz.

#### CATCH: -

Herring, about 90 lbs.

June 3. Day fair, very warm. Very light breeze from the S. W. Saw following pounds fished:

Blues, about 25 lbs.

Black bass, 1.

Perch. 7.

No. 2 hellow, 6.

Suckers, 1.

Sheepshead. 3.

Mooneye, few.

### Small fish:

2 yellow pickerel, 8 1/4 in. 4 oz.

10 1/4 \* 5 \*

2 blue pickerel, 5 oz. and 6 oz.

2 herring, 8 1/4 in. 4 oz.

9 1/2 \* 6 \*

2 perch, 3 - 4 oz.

Lifted A. 2, b. 10 minutes to lift, 1/4 minute relieving gilled fish.

Gilled while lifting:

7 perch, 3 - 5 oz. Four pushed through and 2 saved.

#### CATCH: -

Herring, about 20 lbs.

Blues, about 10 lbs.

No. 1 yellow, 1.

No. 1 blue, 1.

Black bass, 4.

```
Perch, few.
       Suckers, 1.
       Mooneye
                      Very few.
       Sheepshead
     Small fish:
       1 herring, 6 oz.
       2 or 3 perch.
     Lifted A. 1, b. 13 minutes to lift,
1/4 minute relieving gilled fish.
     Gilled while lifting:
          1 sauger, 4 oz. discarded.
          1 herring, 9 1/4 in. 7 oz. retained.
          2 perch, discarded.
     CATCH: -
       Herring, about 120 lbs.
       Blues, about 50 lbs. (average 10 - 11 oz).
       Yellows, 3.
       Black bass, 4.
       Suckers. 2.
       Perch, 5.
       White bass, 2.
       Sheepshead
                      2 or 3.
       Mooneye
```

Small fish:

- 1 Black bass, 9 1/2 in. 9 oz. retained.
- 2 herring, 8 3/4 in. 5 oz., 9 1/2 in. 6 oz retained.

Lifted B. 3, b. 12 minutes to lift.

Time for relieving gilled fish inappreciable.

Gilled before lifting:

l little sauger, pushed through net. Gilled while lifting:

1 sauger, 11 in. 5 oz.

1 pickerel, 10 3/4 in. 6 oz.

#### CATCH: -

Herring about 90 lbs.

Blues, about 50 lbs. (Did not average over 9 oz., but none smaller than 8 oz.).

Yellows, 3 or 4.

Catfish, 1.

Perch, 3 or 4.

Sheepshead, 2 or 3.

Mooneye, 3 or 4.

### Small fish:

2 herring,6 oz. each.

l small perch.

Lifted B. 2, b. 13 minutes to lift. Gilled while lifting:

- 1 sauger, pushed through.
- 2 herring, each 7 oz. held in broken meshes.

#### CATCH: -

Herring, about 80 lbs.

Blues, about 35 lbs.

Black bass, 1 (2 1/2 1bs.).

Catfish, 1.

Suckers, 1.

Rock bass, 1.

Perch. 15.

White bass, 3.

Sheepshead, 4 or 5.

Mooneye, 4 or 5.

Small fish:

l little perch.

Lifted B. 1, b. 14 minutes to lift, about 1 minute in relieving fishes gilled:

Gilled before lifting:

## Gilled while lifting:

3 herring, 4 oz., 6 oz., 7 oz.

2 pickerel, 6 oz., 9 oz. (12 1/4 in.).

### CATCH: -

Herring, about 100 lbs.

Blues, about 50 lbs.

Black bass, 5.

White bass, 3.

Suckers, 4.

Catfish, 1.

Lawyers, 1.

### Small fish:

2 suckers, 2 oz., 7 oz.

2 herring, about 4 and 5 oz.

Lifted C. 2, b. (F. C. net).  $16 \frac{1}{2}$  minutes to lift.

Gilled before lifting 68 herring:

#### On side a.-

33 herring, all weighing over 15 oz., except one which weighed 12 oz. 8 of these fish were spoiled and had to be discarded, four of them were absolutely rotten. Many others were soft, but might pass.

On b. side: 11 herring, -

9 3/4 in. 8 oz.

10 1/2 \* 10 \*.

10 oz., 10 oz.

12 " 12 "

12 \* 16 \*

16 \* 16 \*

16 \* (rotten).

Three or four of these herring were right soft, but only one rotten, and that was in an awful state.

### On c. side:

24 herring, all large except one weighing 2 oz. 3 were very large and weighed about 1 1/2 lbs. each.

5 of these herring were so soft as

to be useless, 2 absolutely rotten.

Gilled in bag while lifting, 11 fishes:

1 herring, 10 in. 9 oz.

1 perch, 11 in. 12 oz.

1 Black bass; 11 3/4 in. 16 oz.

1 white bass, 9 1/4 in. 8 oz.

1 blue pickerel, 13 1/4 in. 12 oz.

1 yellow pickerel, 15 1/4 in. 16 oz.

5 sheepshead, 4 - 6 oz.

## CATCH: -

Herring, about 40 lbs. + about 75 lbs. gilled = 115 lbs.

Blues, 5.

Catfish, 2.

Black bass, 5.

No. 1 yellow, 1.

No. 1 blue, 1.

Perch, 3.

White bass, 3.

Suckers, 1.

Sheepshead, 9.

The herring from the ordinary nets to-day were in very good condition, but a few of them were the slightest bit soft.

Mr. Ditchy has just received word to begin pulling out twine, and to take out 3 nets at once. A.3, and A. 2, were removed to-day.

Total catch from 15 pounds was estimated as follows:

Herring	about	1300	lbs.	
Blues	*	990	•	
No. 1 pickerel	•	50	<b>W</b> (*)	
Perch	•	100	•	

Black bass	about	30 lbs.
Suckers		30 •
White bass	•	20 •

June 4. Morning clear, hot, and very light variable breezes, alternating with calms.

Saw the following nets fished:

Lifted c. 3, b. Gilled while lifting:

- l very small herring, pushed through net.
- 1 perch, 6 oz.
- l large pickerel, caught in a broken mesh.

#### CATCH: -

Herring, 54.

Blues, 30 ) All good size, averaging )
Yellows, 5 ) 12 oz.

Black bass, 1.

Perch, 6.

Saugers, 2.

Suckers, 1.

Sheepshead, 5.

Mooneye, 13.

Small fish:

```
5 herring, -8 1/2 in. 5 oz.
9 1/4 * 6 *
9 1/2 * 7 *
9 1/2 * 7 *
```

Lifted C. 2, b. (F. C. net).

Gilled before lifting:

Side a. 6 herring, from 1 - 1 1/4 lbs. ea. 1 pickerel, 13 in. 12 oz.

10 1/4 \* 8

Side b. 1 dead blue pickerel gilled from outside, 13 in. 12 oz.

Side c. 10 herring, weighed from 1 to
1 1/2 lbs. except one, 13 in. 12
oz.

None gilled while lifting.

CATCH: -

Herring, 3 + gilled 16 = 19.

Blues, 8 + gilled 2 = 10.

Yellows, 2.

Black bass, 1.

Perch, 1.

Suckers, 4.

No trash and no small fish.

Only one herring discarded on account of softening.

Lifted C. 1, b. Gilled before lifting:

1 large herring in a broken mesh.

Gilled while lifting:

5 perch, 4 - 6 oz.

1 sauger, 11 in. 6 oz.

2 herring, 8 3/4 in. 6 oz.

\* 6 \*

### CATCH: -

Herring, 12.

Blues, 2.

Saugers, 1.

Perch. 11.

Suckers, 4.

White bass, 3.

Sheepshead,

About 40 lbs.

### Small fish:

Mooneye

1 herring, 8 3/4 in. 5 oz.

Lifted B. 3, b. Gilled while lifting:

3 little perch, pushed through net.

2 little pickerel, pushed through net.

1 herring, 7 1/4 in. 3 oz.

#### CATCH:-

Herring, 58.

Blues, about 100 lbs.

Yellows, 17.

Perch, 16.

Black bass, 4.

Suckers, 2.

White bass, 2.

Mooneye, 5 or 6.

### Small fish:

1 blue pickerel, 10 in. 4 oz. and 4 or
5 others weighing from 6 - 7 oz.

Lifted B. 2, b. Gilled while lifting:

7 little perch, pushed through net.

1 little pickerel, pushed through net.
CATCH:-

Herring, about 30 lbs.

Blue pickerel, about 50 lbs.

Black bass, 8.

Rock bass, 1.

Suckers, 4.

Yellow pickerel, few.

Perch, few.

Mooneye, few.

No small fishes.

Lifted B. 1, b. Gilled before lifting:

2 herring, 8 3/4 in. 7 oz.

12 1/2 " 16 "

1 pickerel, 11 1/2 in. 9 oz.

5 small perch gilled while lifting.

#### CATCH: -

Herring, about 45 lbs.

Blue pickerel, about 140 lbs.

Black bass, 5.

Suckers, 5.

Perch. 16 - 20.

Yellow pickerel, very few.

### Small fish:

1 Black bass, 10 in. 11 oz.

Lifted A. 1, b. Gilled while lifting:

5 perch, shaken out.

1 herring, 9 in. 7 oz.

## In broken meshes:

1 pickerel, 12 oz.

2 herring, 14 oz., 16 oz.

#### CATCH: -

Herring, about 30 lbs.

Blues, about 80 lbs.

Black bass, 7.

Yellows, few.

Perch, few.

Suckers, 4 or 5.

Sheepshead, 3 or 4.

Small fish:

3 or 4 blue pickerel, 5 - 7 oz.

The eastern strings of twine showed an increase in catch over yesterday. Total catch was noticeable in having so little trash and such a very few undersized fish.

The total catch from 13 pounds to-day was:

Herring	825 lbs.
Blue pickerel	740 "
Black bass	25 <b>*</b>
Perch	30 *
Suckers	30 *

The third or outside net was taken from C. string to-day, the twine washed and stowed away.

A squall passed over the island this afternoon with terrific force doing considerable damage. Wind and rain continued all night.

June 5. Heavy S. W. wind and rain storm all morning, air much cooled. Nets were lifted notwithstanding wind and rain, and the catch was better than yesterday. Lifting of nets very difficult on account of heavy current. Fish Commission net had about 75 lbs. almost clear herring, about 1/3 of which had gilled. majority of them on a. side. Only a very few had softened and required discarding. Net A. 1, b. had the largest catch, about 225 lbs., nearly all blue pickerel. Most of the herring were taken in the eastern strings, and the blue pickerel in the western strings. The fish were sorted on the wharf and there was practically no trash; only 2 mooneye and 19 sheepshead from all the 12 pounds.

Total catch from the 12 pounds was:

Herring	1195	lbs.
Blue pickerel	990	*
Black bass	25	•
Perch	10	•
Suckers	8	
Carp	6	•
No. 1 pickerel	6	•

There were more small pickerel than yesterday. Probably 20 lbs. of them weighed between 4 - 6 oz.

June 6. Northwest gale of wind blowing this morning, and no fishing done. Temperature Air 49° F.

June 7. Fair, warmer. Gentle breeze from the south. Witnessed fishing of following pounds, 2 days fishing.

Lifted C. 2, b. (F. C. net).

Gilled before lifting:

a. side, 71 herring, all large.

1 yellow pickerel 1 1/2 lbs.dead

b. side, 10 herring, 7 of which weighed

1 lb. and over, while 3

weighed, 12 oz., 14 oz.,

15 oz.

l blue pickerel, 13 in. 1 lb. dead.

c. side, 82 herring, all large except:
9 1/4 in. 9 oz.

11 1/4 \* 13 \*

12 • 13 \*

11 1/2 in. 15 oz.

2 blue pickerel, 16 and 18 oz. dead.

l white bass.

Gilled in bottom before lifting:

4 herring, 9 1/2 in. 9 oz.

10 • 9 •

11 3/4 \* 11 \*

12 \* 13 \*

Gilled while lifting:

b. side, 5 herring, 16 oz., 16 oz.,

15 oz., 14 oz., 12 oz.

1 blue pickerel, 18 oz.

1 yellow pickerel, 16 oz.

In all there were before lifting 167
gilled herring, and 5 while lifting.

Between 30 and 40 of these gilledherring
were soft as mush and had to be thrown
away, and some of them emitted a foul
odor. A comparatively larger per centage
of the gilled fish were alive, however,
to-day. There were quite a number of
herring inside the net bearing marks of
having been gilled.

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CATCH: -
```

Herring, 220 + gilled 172 = 392.

Blue pickerel, 13, all over 1b. except 1.

Yellow pickerel, 4, all weighed over 1 1b.

Catfish, 1 (3 1/4 lbs.).

White bass, 1.

Sheepshead, 1.

Mooneye, 2.

All the pickerel weighed over a 1b. except

1 blue, 12 3/4 in. 12 oz.

No small herring.

Lifted C. 1, b. Gilled before lifting:

3 herring, 2 large and 1 small

(7 1/2 in. 2 oz.).

1 perch, 5 oz.

Gilled while lifting:

1 perch.

1 herring in a broken mesh.

#### CATCH: -

Sturgeon, 2 (15 and 20 lbs.).

Herring, about 200.

Blues, 8 or 10.

Catfish, 2 (large).

Carp. 1.

Suckers, 2.

Perch. 2.

White bass. 4.

Mooneye, 300 odd.

Small fish:

2 or 3 pickerel, 4 - 6 oz.

Lifted B. 3, b. Gilled before lifting:

3 small herring, 6 1/2 in. about 1 oz.

7 1/2 \* 1 \*

8 3/4 \* 4 \*

Gilled while lifting:

l little pickerel.

2 little herring, 7 1/4 in.

8 1/2 \*

l large herring in a broken mesh.

#### CATCH: -

About 450 lbs., almost clear herring.

Blue pickerel, about 8 - 10 lbs.

No. 1 yellow pickerel, 1 (6 or 7 lbs.).

Carp, 1.

Saugers, 1 or 2.

Mooneye, 1/2 dozen.

### Small fish:

6 or 8 blue pickerel, 5 - 6 oz.

6 or 8 small herring.

Lifted B. 2, b. Gilled while lifting:

1 little perch.

#### CATCH: -

About 300 lbs., nearly all herring.

Blue pickerel, 12 or 15.

Suckers, 2.

Mooneye, very few.

### Small fish:

7 blue pickerel, 4 - 6 oz.

4 or 5 small herring.

Lifted B. 1, b. Gilled while lifting:

2 pickerel, 5 and 6 oz.

2 medium herring in broken meshes.

#### CATCH: -

Herring, about 200 lbs.

Blue pickerel, about 100 lbs.

Black bass, 5.

Yellow pickerel, few.

Suckers, 3 or 4.

No. 1 yellow, 2 very large.

#### Small fish:

A very few herring and pickerel.

Lifted A. 1, b. Gilled before lifting:

4 herring in a. d. corner, bunched:

2 large ones in broken meshes.

1 very small and 1 13 oz.

Gilled while lifting:

2 small pickerel.

5 herring, 3 mediums and 1 large in broken meshes, the other very small.

#### CATCH: -

About 3 cwt., 1/2 herring, 3/8 pickerel and 1/8 as follows:

Black bass.

White bass.

Suckers.

Carp.

Mooneye.

Sheepshead.

There were a very few small herring and blue pickerel.

The recent cold snap greatly improved the quality of the herring. They were as firm and nice as possible to-day, and averaged large size. The nets had fished for 48 hours, but

there was a perceptible increase in the herring from the nets I saw lifted, while the two eastern strings D. and E. showed a very large increase.

Total catch from the 12 nets to-day:

Sturgeon	35	lbs.
Herring	3500	¥
Blue pickerel	660	*
No. 1 yellow pickers	1 25	•
Black bass	15	•
Suckers	20	•
Perch, about 2 do	zen.	

June 8. Day fair and warm. Light airs from south. A very strong west current in the lake, making it very difficult to lift the twine. Saw the following nets fished:

Lifted C. 2, b. (F. C. net).

Gilled before lifting:

- a. side, 39 herring, all large.
  - 8 blue pickerel, smallest 13 3/4 in. largest 14 3/4 in.
- b. side, 6 herring, one small, measuring 9 3/4 in. the others weigh-

ing from 13 to 16 oz.

3 blue pickerel, 12 - 15 oz.

1 white bass, measuring 9 in.

5 blue pickerel, 12 3/4 in.

13 1/4 •

13 1/4 \*

13 1/2 \*

13 3/4 \*

## Gilled while lifting (side b.):

4 herring, medium size.

2 blue pickerel, 13 - 14 in.

1 perch, 9 3/4 in.

### CATCH: -

Herring, 57 + gilled 82 = 139.

Blue pickerel, 25 + gilled 18 = 43.

Yellow pickerel, 3.

Black bass, 4.

White bass, 1.

Suckers, 1.

Mooneye, 4.

No small fish.

Lifted C. 1, b. Gilled before lifting:

4 large herring im broken meshes.

Gilled while lifting:

2 little 4-oz. herring ) thrown away

2 little pickerel

#### CATCH: -

Herring, about 150 lbs.

Blue pickerel, about 30 lbs.

Yellow pickerel, 3 large.

Catfish, 3 large.

Saugers, 1.

Perch, 1.

Carp, 1.

Sheepshead )

Mooneye

## Small fish:

3 blue pikerel, 4 - 6 oz.

Lifted B. 3, b. Gilled while lifting:

1 little herring.

1 little mooneye.

### CATCH: -

About 300 lbs., nearly all blue pickerel.

In addition:

Yellow pickerel, very few.

Herring, about 30 lbs.

Carp, 1.

Sheepshead, 3 or 4.

#### Small fish:

2 yellow pickerel.

Few blue pickerel.

## Lifted B. 2, b. Gilled while lifting:

1 little herring, 7 in.

3 blue pickerel, fair size.

### CATCH: -

About 350 lbs., mostly blue pickerel.

A few herring, 2 suckers, and 1 large sheepshead.

#### Small fish:

4 herring.

Few blue pickerel.

## Lifted B. 1, b. Gilled while lifting:

5 herring ) All small except 2 of ) the herring which were 5 pickerel ) caught in broken meshes.

#### CATCH: -

Herring, about 150 lbs.

Blue pickerel, about 350 lbs.

Black bass, 3 or 4.

Suckers, 2 or 3.

Perch, 1.

Yellow pickerel, few.

Mooneye, several.

Lifted A. 1, b. Gilled while lifting:

7 pickerel.

1 sauger.

6 herring.

1 perch.

5 of the herring and 1 pickerel gilled in broken meshes.

#### CATCH: -

Herring, about 75 lbs.

Blue pickerel, about 300 lbs.

Black bass, 5.

Perch, 4.

Yellow pickerel, very few.

Suckers, 2.

Carp, 1.

Mooneye, 3 or 4.

Small fish:

3 or 4 herring.

Few blue pickerel.

The blue pickerel to-day averaged smaller than usual, probably 8 or 9 oz.

The t	otal	catch	from	the	12	pounds	was:
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Herring	:	1324	lbs.
Blues	;	3300	•
Black bass		12	•
No. 1 blue and	yellow	15	•
Carp		<b>4</b> 0	•
Suckers		12	*
White bass,	about	one	dozen.
Perch	•		*

June 9. Day fair, cool. Wind N. W., light.

The fish were not landed to day, the pound
boats carried them right to Sandusky from
the nets.

The total catch was a great deal lighter than yesterday; strings D. and E. had very few fish. C. string (containing the F. C. net) caught less fish than the nets in A. and B. strings.

## Gilled in the F. C. net:

- a. side, 30 odd herring.
- b. side, 3 or 4 herring and pickerel.
- side, between 25 and 30 herring and2 large pickerel.

Caught inside the net, about 30 herring and 10 pickerel.

Total catch from the 12 pounds to-day was:

Herring	440	lbs.
Blues	1935	•
No. 1 pickerel ) Black bass )	40	tr
Suckers	80	w
Catfish	8	*

June 10. Day fair and warm. Calm. Saw the following nets fished:

Lifted C. 2, b. (F. C. net).

Gilled before lifting:

- a. side, 8 herring, 1 to  $1 \frac{1}{4}$  lbs.
- c. side, none.
- b. side, 1 blue pickerel, 12 1/2 in.

Gilled while lifting:

\*\*

b. side, 5 blue pickerel.

2 yellow pickerel.

1 perch (9 in.).

1 herring (12 3/4 in.).

1 white bass (9 3/4 in.).

The smallest gilled pickerel was 12 1/2

in. long, the largest 14 1/4.

#### CATCH: -

Herring, 19 + gilled 9 = 28. All large.

No. 1 blue, 1.

No. 1 yellows, 5.

No. 2 blues, 8 + gilled 5 = 13.

No. 2 yellow, 4 + gilled 2 = 6.

Black bass, 2.

Suckers, 1.

Perch. 2.

"Lake Shad", 1.

The smallest pickerel inside the net measured 13 in.

No trash, and no small fish. Two of the gilled herring were rotten.

Lifted C. 1, b. Gilled before lifting:

1 small sauger )

## Gilled while lifting:

l little blue pickerel, about 3 oz.

2 little perch, about 3 oz.

#### CATCH: -

Herring, 17.

No. 2 pickerel, 7.

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Black bass, 3.
  White bass. 2.
  Perch. 3.
  Suckers, 3.
  Sheepshead
  Mooneye
Small fish:
  3 pickerel, 3 to 4 oz.
  1 white bass.
Lifted B. 3, b. Gilled while lifting:
     4 little blue pickerel.
     2 little perch.
CATCH: -
 Muskallonge, 1 (29 3/4 in.).
 Herring, about 40 lbs.
  Blue pickerel, about 120 lbs.
 Yellow pickerel, about 10 lbs.
  Black bass, 2.
 White bass, 2 or 3.
 Perch, 6 or 8.
 Carp, 1.
 Sheepshead
 Mooneye
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Most of the blue pickerel were small and

averaged about 8 oz.

There were a good many weighing from 4 - 6 oz.

Lifted B. 2, b. Gilled before lifting:

1 little sucker, weighing about 2 oz.

Gilled while lifting:

- 3 perch, about 3 oz. each.
- l herring, about 4 oz.
- 9 blue pickerel, from 4 to 8 oz.

#### CATCH: -

Herring, about 1/2 dozen.

Blue pickerel, about 200 lbs.

Black bass, 2.

Suckers, 1.

Perch, 4 or 5.

Sheepshead, 2 or 3.

There were a good many small blue pickerel.

Lifted B. 1, b. Gilled while lifting:

- 1 medium herring )
  2 blue pickere1, ) In broken meshes.
   (about 1 1/4 lbs.)
   each.)
- 9 small pickerel.

#### CATCH: -

Herring, 6 or 8.

Blue pickerel, about 75 lbs.

Black bass, 6 or 8.

White bass, 2 or 3.

Suckers, 2 or 3.

Perch, 20 or 30, weighing not over

4 oz. each.

Suckers, 2 or 3.

Catfish, 1.

Yellow pickerel, very few.

Sheepshead, few.

A number of small blue pickerel weighing between 3 and 6 oz. 20 to 30 little perch weighing 2 - 4 oz. These perch were not thrown out, and the men said they would be iced and sold.

Lifted A. 1, b. Gilled while lifting:

7 little perch, 2 - 3 oz. Those easily relieved were saved, others pushed through the net.

2 small pickerel, about 4 oz. each. CATCH:-

Herring, 11.

Blues, about 100 lbs.

Saugers, 2.

Catfish, 2.

Black bass, 5.

White bass, 2.

Sheepshead, very few.

A number of small blues.

The total catch from the 12 pounds to-day was:

Herring

370 lbs.

Blue pickerel

1155 '

June 11.

The catch was even smaller than yesterday.

Mr. Ditchy expects to have all of his twine out by the 15th instant.

I left Kelley's Island to-day for Washington.

### REGARDING WASTE FISHES AND SMALL FISHES.

All mooneye have been discarded. On two or three occasions, while the run of fish was small, large sheepshead weighing above 4 lbs. were retained, otherwise all the sheepshead have been discarded.

Not the slightest care has been exercised in regard to the return into the lake of undersized fishes, except with respect to small sturgeon and small catfish. All catfish weighing a lb. and less have been thrown back into the water in good condition, and sturgeon under about 8 or 10 lbs. have been returned to the water. This attention to undersized catfish and sturgeon has been strict; but these species have been very few, and the attention given them was practicable.

As the catch of perch has been small, the undersized ones could have been thrown back into the water in most instances, but this was not done.

In many cases the undersized pickerel, or the great majority of them, might have been

returned to the water in good condition; but when the catch has been considerable this would have been impracticable, unless after lifting one pound net, the fish were thoroughly sorted before going to the next. When the wind has been favorable, as it has most often been, it has taken less than five minutes to go from one net to another, and it would certainly be impracticable to cull out all undersized fishes, when large fares are bailed into one side of the boat in such close succession, even had an additional man been especially detailed for this purpose. I have tried to cull out the small fish myself and found I could not do it. Both boats on this fishing ground have been short handed all spring, and Mr. Ditchy says they have not paid expenses. The fish have all been dead by the time the boats reached the wharf, and it would be of no use to cull out the small fish then. The boats have often been late in reaching the wharf, the steamer waiting for them and not allowing time for sorting the fish. If the boats were required to stop between nets and pick out small fishes, they could not get the fish to the steamer in

time, unless the nets were lifted during the previous night; as it is, they start out about 3 o'clock every morning.

The small fishes do not go out through
the F. C. net while it is being lifted, they
all make their escape before the net is lifted.
The water has been very clear this spring and
any fish escaping could have been seen.

MR. JOHN DITCHY'S OPINION OF THE FISH COM-MISSION NET.

Mr. Ditchy says he would not care to fish a net with mesh the size of the F. C. net, and he does not think any other fisherman would; too many fish are gilled. He thinks with a very large catch of herring or pickerel as they have in the fall, so many would gill, that it would be a very difficult matter to lift the net. Again the gilled herring do not compare favorably with the other herring, they are bruised and bloated and stripped of scales and often quite soft. Should weather prevent them from lifting the nets for two or three days, as invariably happens several times during the fall fishing, all the gilled herring would be found rotted. Then the net probably lets through some good fishes. These are the only bad features of the net, and on the other hand it has many advantages. The net is lighter, the twine would cost less, it would stand the wear and tear better, and it would be easier lifted, providing not a large quantity of fish

gilled, than the ordinary net; and the net permits the escape of all undersized fishes. But these advantages do not outweigh the disadvantages.

He advises experimenting with a mesh of 2 3/4 inches (extension measure) as at present contained in the back of the Fish Commission But few fish have gilled in this mesh net. before lifting, and not a great quantity while lifting; and the fish that gill in this side in most cases have only got their heads in the mesh, whereas they get half their body in on the sides, where the mesh is 3 inches; but this net has not had a fair test as far as pickerel are concerned, and when pickerel only get their heads in, they are very difficult to release, and it cuts ones hands all to pieces. Whether or not the desirable undersized fishes would escape through the 2 3/4 inch mesh is impossible to say from the present experiment.

Mr. Ditchy is also of the opinion that this net would hold no saugers at all, and his fishing crews bear him out in this opinion as does also Mr. Stoll.

For the above named reasons Mr. Ditchy is

confident that this Fish Commission net would not do for fishing in Lake Erie, but says it might work profitably in some of the other lakes where only whitefish and large pickerel are caught.

# WHAT MR. STOLL HAS TO SAY OF THE FISH COM-MISSION NET.

Mr. Stoll is confident that this net will not do for Lake Erie fishing. While the records secured from this season's fishing will be of much value, he considers the test very unsatisfactory, because there was no large run of fish. He thinks with a ton or two of herring in the net there would be a fish in every mesh, all of which would be of inferior quality and some absolutely spoiled; and in case of a blow for two or three days every fish would be rotten. Pickerel, he says, would gill just as badly, if not worse, than herring, and men could not lift a net filled with gilled pickerel, it would tear their hands as well as the net all to pieces.

Wind veered to N. W. and blew very hard all day. Temperature 40° F.

May 15. Ugly weather continues. Wind abating, very cold. Ditchy lifted 14 nets, one day's fishing.

CATCH: -

Whitefish. - 5 in count, weighing between 2 and 3 lbs. each.

Herring. About 35 lbs. No very small ones. Average 3/4 lb. each.

Black bass .- About 20 lbs., medium size.

Catfish -- About 15 lbs., medium size.

Perch .- About 50 lbs.

White bass .- About half dozen.

No. 1 pickerel .- About 50 lbs.

No. 2 pickerel and Saugers. - About 250 lbs., mostly yellow pickerel. Some very small ones.

Mullet .- About 60 lbs.

Sheepshead. - Very few. Storm has driven them away. Caught scarcely anything but sheepshead before the storm.

. The Fish Commission net was introduced to-